

**ROUND FOURTEEN
GROUNDWATER MONITORING REPORT
2251 ARMOUR ROAD SITE
CONDUCTED OCTOBER 2013**

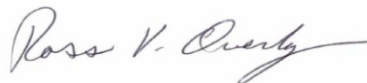
**RESPONDENT
Rio Tinto AuM Company
4700 Daybreak Parkway
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PREPARED AND SUBMITTED BY

Gerald Pepper



Ross V. Overby



January 21, 2015

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EXECUTIVE SUMMARY

This report presents the results of the fourteenth round of groundwater monitoring at the Armour Road Site. The monitoring was performed from November 11 through November 17, 2014. Resampling of one well, GWM-02S, was done December 22 and 23, 2014. During this round a concurrent study was done to determine if analytical method 6010, used to determine the arsenic concentrations, could report higher than actual arsenic concentrations due to analytical interference with other constituents in the groundwater.

The findings of the fourteenth round of groundwater monitoring are provided below.

E.1 Background

The well field currently consists of twenty seven (27) monitoring wells. The wells are screened in zones. The zones are as follows:

- The shallow zone at a depth of about 20 to 30 feet;
- The deep zone which is at a depth of about 40 to 50 feet; and
- The bedrock interface which is at a depth of approximately 100 to 120 feet.

E.2 Results - Water Levels

The water levels in November 2014 were the same as those measured in July 2014 (approximately 720 msl). Groundwater flow was toward the southeast, toward the Missouri River. Gradients are on the order of 0.0015 to 0.00072 feet per foot. The vertical gradient in wells near the west Norfolk Southern storm water basin was downward, confirming the contribution of recharge from the basin. Elsewhere on the Site there were no notable vertical gradients.

E.3 Results - Water Quality

E.3.1 Shallow Zone

Arsenic concentrations on the Armour Road Property have decreased approximately 50% since 2013 (101,000 µg/L down to 49,900 µg/L). Directly down gradient of the Property arsenic concentrations have been slowly decreasing over the past four rounds of monitoring. Arsenic concentrations further down gradient of the Property, in the NS yard and in the light industrial area, are low ranging from not detect (ND) to about 124 µg/L.

E.3.2 Deep Zone

The arsenic concentrations in the deep interval on the Property have remained stable over the past year. Directly down gradient of the Property arsenic concentrations have continued a downward trend. Further down gradient, under the NS yard, the arsenic concentrations continued a cyclical increasing/decreasing trend in GWM-08D. The arsenic concentrations in all other wells under and south of the NS yard are generally stable.

E.3.3 Bedrock Zone

On and directly down gradient of the Property arsenic concentrations are low and stable. Further down gradient, in the NS yard, a decreasing trend was noted at GWM-08B and a cyclical increasing/decreasing trend is noted at GWM-14B.

1.0 INTRODUCTION

This report presents the results of the fourteenth round of groundwater monitoring at the Armour Road Site. The monitoring was performed from November 11 through November 17, 2014. Resampling of GWM-02S was done December 22 and 23, 2014. During this round of monitoring a concurrent study was done to determine if analytical method 6010 used to determine the arsenic concentrations could report higher than actual arsenic concentrations due to analytical interference with other constituents in the groundwater.

The findings of the fourteenth round of RI groundwater monitoring at the Armour Road Site (Site) are provided below.

2.0 ROUND FOURTEEN MONITORING

The location of the Site is shown on Figure 1. The monitoring is being conducted for the Remedial Investigation (RI) under the Consent Decree - Civil Action Number 4:10-cv-00057-SOW (CD). The data provided herein documents the work done during the current monitoring round, the data from the round, water quality trends over the previous year, and exceptions from the planned work. The data table in this monitoring report provides the results of all water quality data gathered since the mid-1990s.

2.1 Overview of Monitoring Network

The groundwater monitoring well network is shown on Figure 2. The current monitoring network consists of twenty seven (27) wells. The screened intervals of the wells in the monitoring network are shown on Figure 3. The wells have a designation letter of S, D, and B.

Wells with an **S** designation are referred to as shallow wells. Shallow wells are screened at the water table. The typical depth of a shallow well is 30 feet below the ground surface. The top of the screen was placed just below the bottom of the clay formation found across the area from the ground surface to a depth of approximately 20 feet.

Wells with a **D** designation are referred to as Deep wells. These wells are screened approximately 10 feet below the shallow well placing the screen interval at a typical depth of 40 to 50 feet below the ground surface.

Wells with a **B** designation are referred to as bedrock interface wells. Bedrock interface wells are screened at the bottom of the alluvial deposits; just above bedrock. Bedrock was found approximately 99 to 124 feet below the ground surface.

2.2 Overview of Monitoring Plan and Procedures

The monitoring plan and procedures are designed to provide comparable results from each sampling event. The following activities are conducted during each Monitoring Event:

- Inspection and recording of the general condition of each MW.
- Collection of water level measurements at all MWs during the first day of the monitoring event.
- At select wells, purging groundwater from each well using the low-flow method. Most wells were sampled using hydrasleeves which require no purging.
- Collection of groundwater samples from twenty three (23) of the wells. Samples are not collected for analysis from wells GWM-08S, GW-09S, GW-11S, and MW-11. These four wells have shown no detectable arsenic over their monitoring history.
- Analytical testing of the collected samples according to the parameter schedule provided on Table 1.
- Collection of field blanks, equipment blanks, duplicate groundwater samples for quality assurance/quality control (QA/QC) purposes and analytical testing of the QA/QC samples for dissolved arsenic.

- Reporting of the monitoring results.
- Calculating trends in arsenic concentrations. Arsenic trend graphs are provided in Appendix A.

The monitoring plan was expanded this round to determine if the analytical method used to determine the arsenic concentrations (USEPA Method 6010) could report higher than actual arsenic concentrations due to analytical interference with other constituents in the groundwater. As a one-time modification to the scheduled monitoring round, arsenic analyses were run on selected wells using method 7062 in addition to the scoped 6010 method. In some circumstances the arsenic results from a 6010 analysis can experience interferences by rare earth elements. The possibility of interference is of interest. Adding method 7062 analysis to our regular test protocol for selected wells was done to establish if there is any analytical interference. The following wells were included in the expanded analytical program:

| Wells | Rationale |
|----------------|---|
| GWM-04 S and D | Down gradient fringe with low arsenic concentrations |
| GWM-05 S and D | Down gradient fringe with low arsenic concentrations |
| GWM-13 D | Down gradient fringe with low arsenic concentrations |
| GWM-06 S | Down gradient fringe with low arsenic concentrations |
| GWM-02 B | Bedrock interface interval with low arsenic concentrations |
| GWM-08 B | Bedrock interface interval with high arsenic concentrations |

2.2.1 Well Inspection and Water Levels

At the beginning of each monitoring event, every MW is inspected to determine its overall condition. Any maintenance issues regarding the well condition are noted and recorded

Static water levels are measured in each MW using an electronic water level indicator capable of measuring the water level to within 0.01 feet. The water level instrument is decontaminated with de-ionized water between each measurement. Water levels are provided on Table 2. Historical water level measurements are provided in Appendix B; the monitoring field records are provided in Appendix C.

2.2.2 Sample Collection

Most groundwater monitoring wells were sampled using Hydrasleeves. Due to the expanded analytical program large water volumes were needed at a few wells to support the required analyses and QA/QC sampling. At these few wells the samples were collected using the low flow method. Field sheets documenting the sampling methods are provided in Appendix C.

All groundwater samples collected from dissolved arsenic analysis were field filtered using a 0.45-micron filter; samples for total arsenic were not filtered. The groundwater samples were chemically and thermally preserved as specified by the analytical methods and were placed in a cooler. Sample numbers were recorded on a chain-of-custody and are delivered to the laboratory for analytical testing.

Purge water generated during each monitoring event is disposed off-Site as either a hazardous or non-hazardous waste, depending upon the concentration of arsenic in the purge water. How purge water was managed during each monitoring event is documented in Section 3.4.

2.2.3 QA/QC Samples

QA/QC samples are collected during each Monitoring Event. QA/QC includes field blanks of deionized water, equipment blanks collected from the pump before it is used to purge and sample a well, and duplicate groundwater samples collected from the monitoring wells. The QA/QC samples are handled and submitted to the laboratory for analysis using the same procedures specified for the groundwater samples.

The laboratory QA/QC includes Method Blanks, Laboratory Control Spikes (LCS) Matrix Spikes (MS), and MS duplicates.

2.2.4 Analytical Testing

Each groundwater sample was analyzed for total and dissolved arsenic (See Table 1). The laboratory analytical data reports are provided in Appendix D.

3.0 GROUNDWATER MONITORING RESULTS AND INTERPRETATION

This section presents the results of the monitoring event conducted from November 11 through November 17, 2014, and the resampling of GWM 02S done December 22 and 23, 2014.

3.1 Current Field Observations

All wells are in good condition.

3.2 Current Water Level Measurements

Water levels were measured on November 11, 2014. The measurements and a conversion of the measurements to water elevations are provided on Table 2.

Groundwater elevations for the current round of monitoring are plotted and contoured on Figures 4, 5, and 6. Historical water level measurements for each MW and the annual trends in water levels are provided in Appendix B. The water levels in November 2014 were approximately 1.7 feet higher than those measured in June 2013.

The groundwater elevations and contours shown on Figure 4, 5 and 6 reveal that, during the November 2014 sampling event, groundwater flow in the shallow, deep, and bedrock interface intervals was toward the southeast, toward the Missouri River. The groundwater flow direction is generally consistent with periods of lower groundwater levels.

The typical groundwater flow gradient is very flat measuring approximately 0.0005 feet per foot. In November 2014 the gradient in the shallow interval was flat near the property measuring 0.0007. The gradient steepened to 0.0015 to the south of the rail yard. In the deep zone the gradient was on the order of 0.0005. The gradient in the bedrock interval was too flat to measure.

Vertical gradients are measured at the following monitoring well clusters:

- GWM-02 (S, D, B)
- GWM-03 (S, D, B)
- GWM-04 (S, D)
- GWM-05 (S, D)
- GWM-08 (S, D, B)
- GWM-09 (S, D, B)
- GWM-11 (S, D, B)
- GWM-13 (S, D)

Examination of the water levels in these wells (See Table 2) reveals a downward vertical gradient in the GWM-09 (0.19 feet). A more pronounced downward gradient is measured in GWM-11 series (0.37 feet). These wells are located near the Norfolk Southern storm water basins. These downward gradients reveal the contribution of recharge from the basins. Elsewhere on the Site there were no notable vertical gradients.

3.3 Water Quality

An assessment of the water quality data generated during this round of sampling is provided below.

3.3.1 Quality Control Results and Interpretation

Sampling and analytical quality control consisted of the following analyses:

- Equipment blanks,
- Duplicate groundwater samples,
- Laboratory blanks,
- Laboratory Control Spikes and duplicates, and
- Matrix spike and matrix spike duplicate analyses.

With a minor exception all laboratory quality control data are with prescribed parameters. In two laboratory analytical batches matrix interference were noted. In these same batches the laboratory control spikes were within specifications indicating that the laboratory processes were within the project specifications. Details of the quality control results are provided on Tables 3, 4, and 5.

3.3.2 Groundwater Analytical Results and Interpretation

This subsection presents the results and interpretation of the analyses performed on groundwater samples.

Exceptions Encountered

An unexpected low arsenic concentration was reported for well GW-02S. This well was resampled on December 22 and 23, 2014 to validate the initial laboratory result. The resampling was done using the low flow and hydrasleeve methods to determine if the sampling method influenced the result. The results for GWM-02S are shown below.

| Sampling Method | Date | Total Arsenic | Dissolved Arsenic |
|-----------------|----------|---------------|-------------------|
| Hydrasleeve | 11/12/14 | 4,010 µg/L | 3,870 µg/L |
| Hydrasleeve | 12/22/14 | 25,500 µg/L | 20,400 µg/L |
| Low Flow | 12/23/14 | 43,200 µg/L | 49,900 µg/L |

The low detection reported in the November analysis was not confirmed. The hydrasleeve method produced a significantly lower result than the low flow method in the resampling analysis. Past sampling studies have shown that the arsenic concentrations in samples are highly

sensitive to any oxygenation of the water before the water is preserved. Given that GMW-02S is a water table well it is possible that installing the hydrasleeve stirred up the water sufficiently to add oxygen to the water and precipitating the arsenic. The November sample was collected 24 hours after inserting the hydrasleeve. The December sleeve sample was collected over a month after the sleeve was installed. The higher sleeve result in December compared to the November result may be due to native groundwater flowing through the well over time. The highest result was measured by the low flow sampling and is the result used to assess the data produced during this round of monitoring.

Snapshot of the Current Round of Groundwater Monitoring

Groundwater samples were successfully collected from each monitoring well during the November 2014 monitoring event. The samples were analyzed for arsenic in filtered and unfiltered samples. The results of the arsenic analyses are provided on Table 6. Due to the long length of Table 6 it has been placed at the end of the tables section to ease the review of the other data tables. Laboratory data sheets and the chain of custody records are provided in Appendix D.

Arsenic in Shallow Groundwater

Concentrations: Isoconcentration lines for arsenic in shallow groundwater are shown on Figure 7. The geometry of the plume is very similar to all previous RI monitoring rounds. On the Property the arsenic concentration in GWM-02S declined 50% since June 2014 to 49,900 µg/L. The arsenic concentration declines rapidly down gradient to 3,720 µg/L at GWM-03S.

The arsenic concentration at GWM-04S was 27.8 µg/L. A remnant of arsenic at a concentration above the MCL was found at GWM-05S (91.8 µg/L). Far down gradient of the Site, the arsenic concentration was below the MCL.

Trends: Data trend graphs are provided in Appendix A. Figure 7 shows trends over the last four monitoring rounds. On the Property, the trend over the past year has been a decline in the arsenic concentrations, dropping from 147,000 µg/L to 49,900 µg/L.

Directly down gradient of the Property, at GWM-03S, the trend over the four monitoring rounds has been a consistent decline in the arsenic concentration, dropping from 10,500 µg/L to 3,720 µg/L. Further down gradient, at well cluster GWM-04S, arsenic concentrations remain relatively stable in the mid 20 µg/L range.

At GWM-05S the arsenic concentration appears to have a slight increasing trend over time. Further down gradient, at GWM-13S and GMW-06 arsenic concentrations are not detected above the reporting limit.

Arsenic - Deep Interval

Concentrations: Arsenic concentrations in the deep monitoring interval are posted on Figure 8 and are shown on Table 6. As with the water table interval, the arsenic concentrations are highest near the Property. The on-Property arsenic concentration in GWM-02D was 8,480 µg/L. Directly down gradient at GWM-03D the concentration was 11,400 µg/L. Arsenic concentrations decline down gradient, measuring 4,090 µg/L at GWM-11D, 52.0 µg/L at GWM-09D, and 185 µg/L in GWM-08D located in the center of the Norfolk Southern rail yard.

Further down gradient, at GWM-04D and GWM-05D, the arsenic concentration declines with dissolved arsenic concentrations of 59.5 µg/L in GWM-04D and 58.1 µg/L in GWM-05D. At GWM-13D arsenic was detected at 68.4 µg/L.

Trends: At GWM-02D (on the Property), the arsenic concentration has been relatively stable over the past four monitoring rounds ranging from 9,840 µg/L to 7,340 µg/L. Directly down gradient of the Property at GWM-03D arsenic concentrations have shown a general declining trend, dropping from 19,100 µg/L to 11,400 µg/L.

Further down gradient, in the Norfolk Southern yard, a slight downward trend in arsenic concentrations is evident in GWM-09D. A pattern of cyclical increasing and decreasing concentrations is evident at GWM-08D. The current round revealed an increase from 147 µg/L to 185 µg/L. The cyclical trend in the arsenic concentrations is most likely due to the southerly and downward attenuation of arsenic from under Railroad Avenue.

Further down gradient, at GWM-04D and GWM-05D the arsenic concentrations appear stable ranging from near 50 µg/L to the mid 60's µg/L.

Arsenic – Bedrock Interval

Concentrations: Arsenic concentrations at the bedrock monitoring interval are posted on Figure 9 and are shown on Table 6. Arsenic at the bedrock interface interval is centered south of the Property, under the Norfolk Southern railroad property (See Figure 9).

The highest arsenic concentration is in GWM-8 (25,400 µg/L). Concentrations decline toward the southwest reaching 11,000 µg/L at GWM-15B and decline to 588 µg/L to the northeast at GWM-14B. Toward the Property, arsenic concentrations decline to 1,870 µg/L at GWM-09B, to 184 µg/L at GWM-11B, and 156 µg/L under the Property in GWM-02B.

The extent of the arsenic at the bedrock interface to the southwest of GWM-15B and southeast of GWM-08B is not monitored with wells. Hydropunch data collected in December 2010 documented that the arsenic was not detected at the bedrock interface to the southeast of the Norfolk Southern rail yard.

Trends: On the Property, in GWM-02B, arsenic concentrations have shown a gradual decline over the past three monitoring rounds. Down gradient at GWM-03B arsenic concentrations have shown a general increasing trend increasing from 63.1 µg/L to 213 µg/L over the four monitoring rounds.

Further down gradient, in GWM-09B and GWM-11B, the arsenic concentrations have shown a generally stable trend. Further down gradient, in GWM-08B arsenic concentrations decreased from 47,100 µg/L to 25,400 µg/L.

In GWM-14B the arsenic concentrations were generally stable at approximately 1,500 µg/L with a significant decline to 588 µg/L in the November 2014 round. A pattern of cyclical increasing and decreasing is evident at GWM-15B. The current round revealed an increase from 9,430 µg/L to 11,000 µg/L. The cyclical trend in the arsenic concentrations is most likely due to the southerly and downward attenuation of arsenic from under Railroad Avenue.

Filtered vs. Unfiltered Analyses

Field filtered and unfiltered samples were analyzed for arsenic. The results are provided on Table 6. The data show that total and dissolved arsenic results are generally consistent with historical trends at each monitoring well, indicating consistent turbidity in each well. Total results tended to be higher or essentially equal to the total arsenic concentrations for the majority of the samples. In a few instances the totals were less than the dissolved results. The consistent finding suggests that the arsenic is predominantly in the dissolved phase.

3.4 Comparative Study of Methods 6010 and 7062

A comparative assessment of the 6010 and 7062 data is provided on Table 7. The data produced by the two methods are generally comparable. Only wells GWM-05S and GWM-13D showed a significantly lower arsenic concentrations when measured by method 7062. The total arsenic concentration was lower in the 7062 analysis for GWM-06S. This method 7062 may provide generally lower arsenic concentrations in some wells the lower results do not change the use or interpretations based on the method 6010 data. Using a consistent analytical method is most appropriate for long term assessment of data.

3.5 Investigation-Derived Wastes

Approximately 30 gallons of purge water was produced during the November 2014 monitoring round. The water was put in a tank (see Table 8). The water will be characterized for disposal once the tank is full following subsequent monitoring rounds.

3.6 Deviations from the Work Plan

No deviations were encountered.

4.0 CONCLUSIONS AND RECOMMENDATIONS

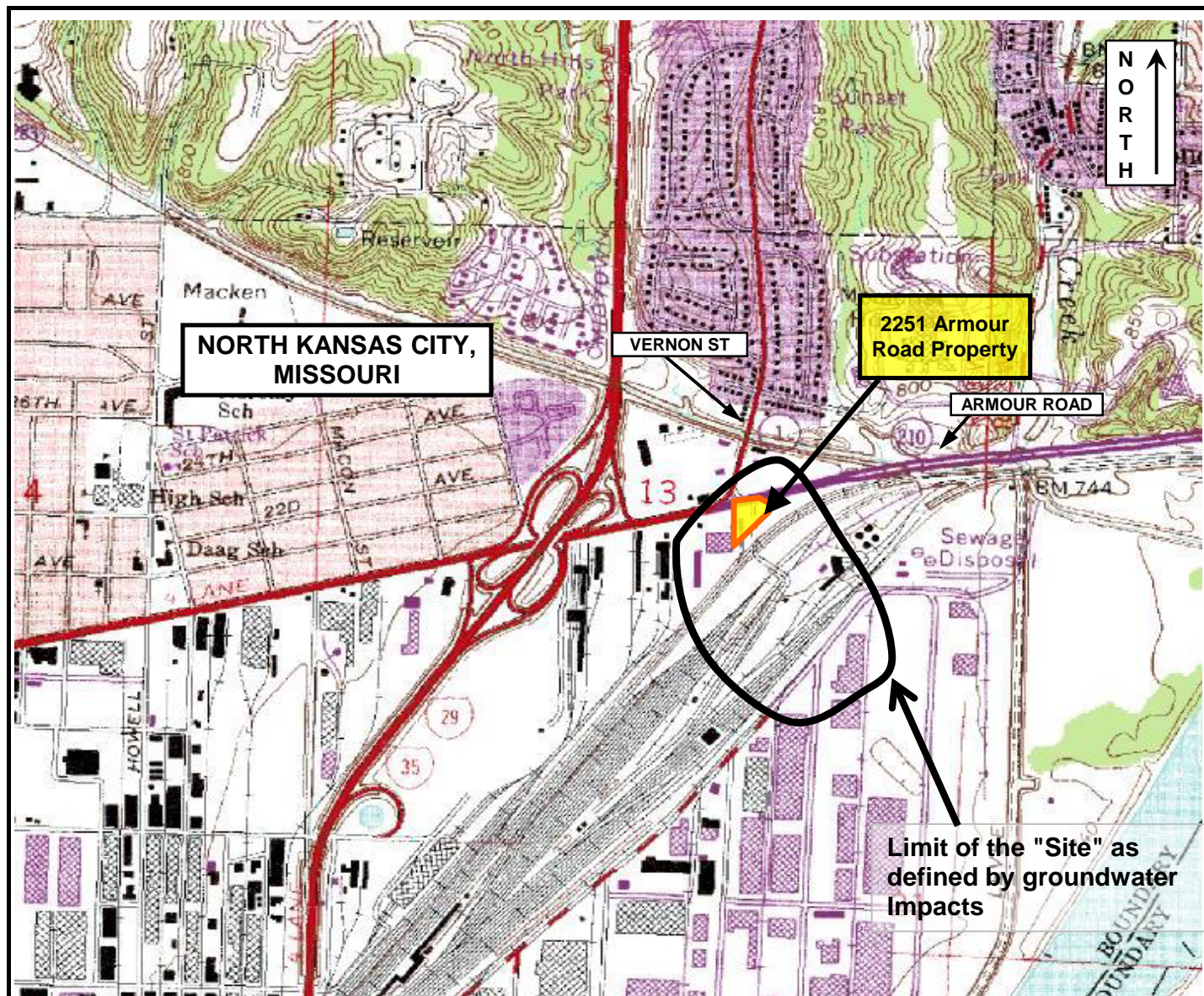
The conclusions from the twelve rounds of RI/FS monitoring are as follows:

1. The monitoring well network is effective at defining the general three dimensional groundwater quality in the Shallow, Deep, and Bedrock monitoring intervals of the RI/FS study area.
2. A marked improvement in groundwater quality was noted at GWM-02S. The improvement was most likely due to generally low groundwater levels.
3. Cyclical trends in some wells reflect arsenic slugs attenuating through the aquifer.
4. Method 6010 is sufficient to reflect arsenic concentrations in groundwater.
5. Using sleeves in water table wells may skew results lower due to oxidation of the water in the well.

4.1 Recommendations

1. Continue annual monitoring.
2. Continue using Method 6010.
3. Sleeves should only be used in water table wells if the water is allowed to stabilize over a period of six months between insertion of the sleeve and removal.

FIGURES



Topographic Map derived from the Terraserver USA internet website.

FIGURE 1-1 GENERAL SITE LOCATION

2251 ARMOUR ROAD SITE

2251 ARMOUR ROAD

NORTH KANSAS CITY, MISSOURI

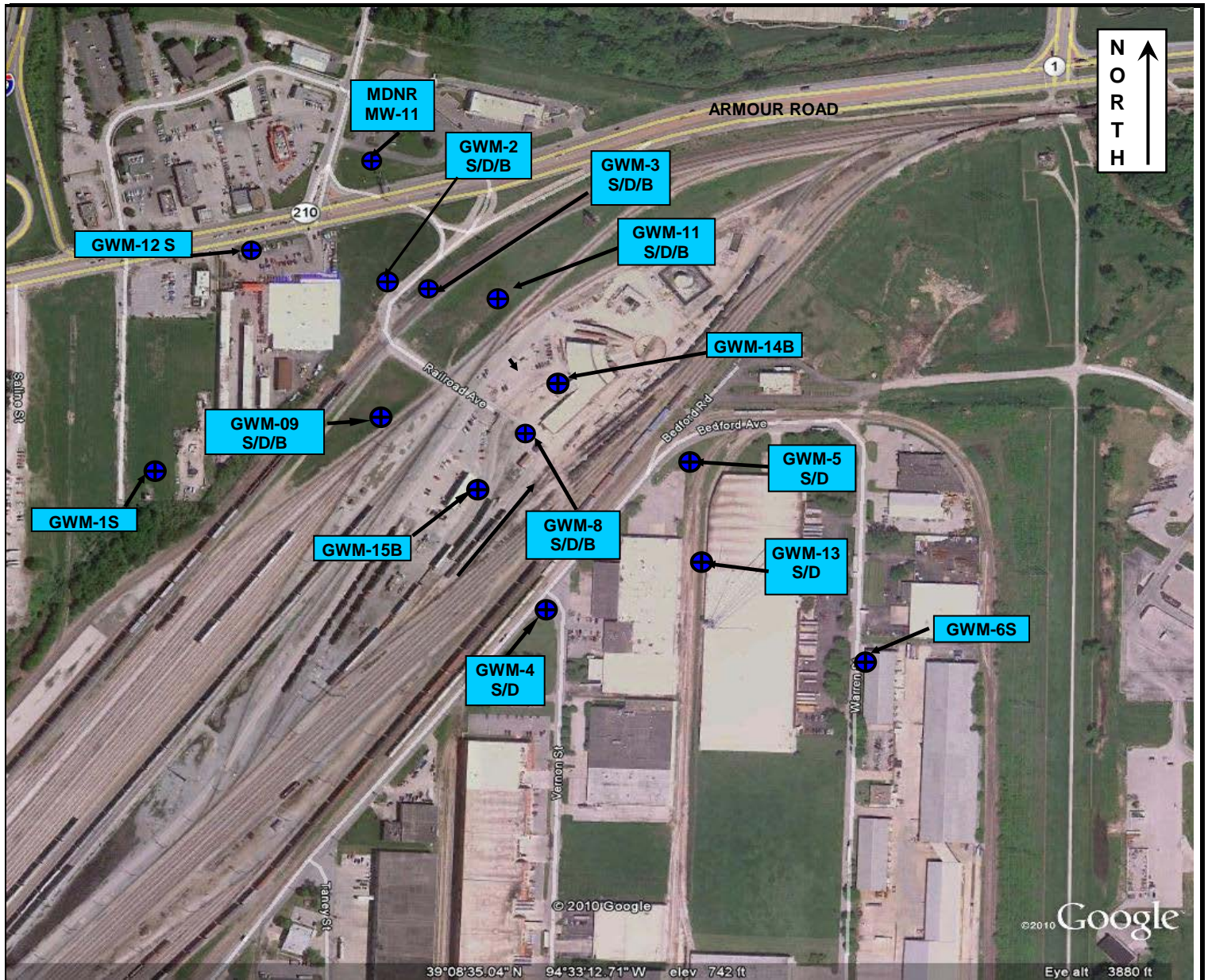
**RIO TINTO
LEGACY
MANAGEMENT**

Rio Tinto Legacy
Management

4700 Daybreak Parkway
South Jordan, Utah 84095

DATE: 3/20/2012
DRAWN BY: RVO
CHECKED BY: GP
FILE NO: 09-908.A-Fig

JOB NUMBER: 09-908.A
SCALE: 1 inch = approximately 1,300 feet
FIGURE NO: 1
SHEET 1 OF 1



Aerial Photograph derived from Google Earth

LEGEND



MONITORING WELLS



WELL CLUSTER ABANDONED MAY 2012

S= Shallow water table well
D= Deep Well (typically 10 ft below S)
DD'= Well Depth Approximately 70Ft.
B= Bedrock/alluvium interface

Figure 2: RI/FS GROUNDWATER MONITORING LOCATIONS

2251 ARMOUR ROAD
NORTH KANSAS CITY, MISSOURI

RIO TINTO
LEGACY
MANAGEMENT

Rio Tinto Legacy
Management
4700 Daybreak Parkway
South Jordan, Utah 84095

| | |
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| DATE: 12/16/2013 | JOB NUMBER: |
| DRAWN BY: RVO | SCALE: 1 inch = approximately 540 feet |
| CHECKED BY: GP | FIGURE NO: |
| FILE NO: | SHEET 1 OF 1 |

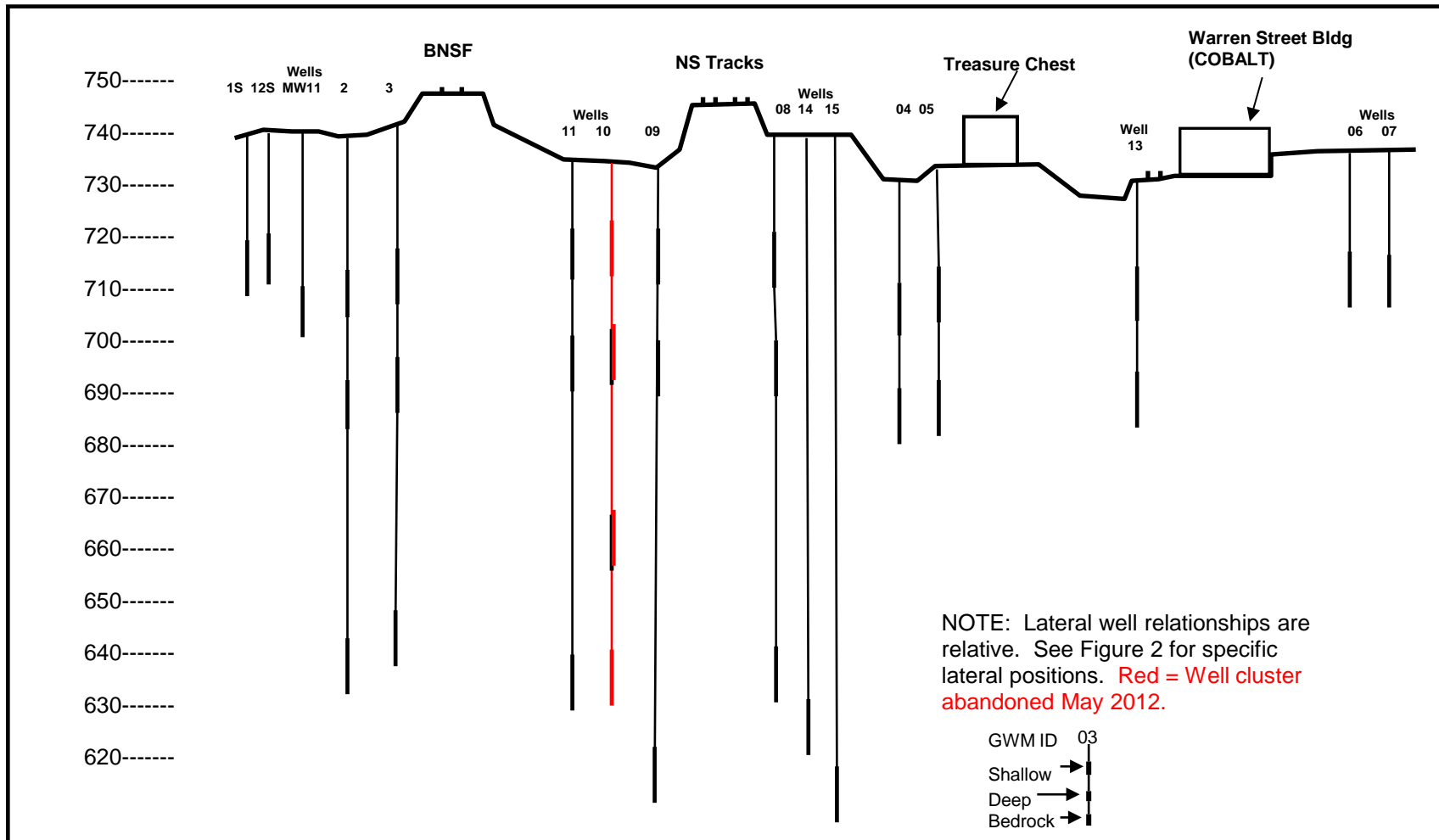


FIGURE 3 MONITORING NETWORK WELL SCREEN

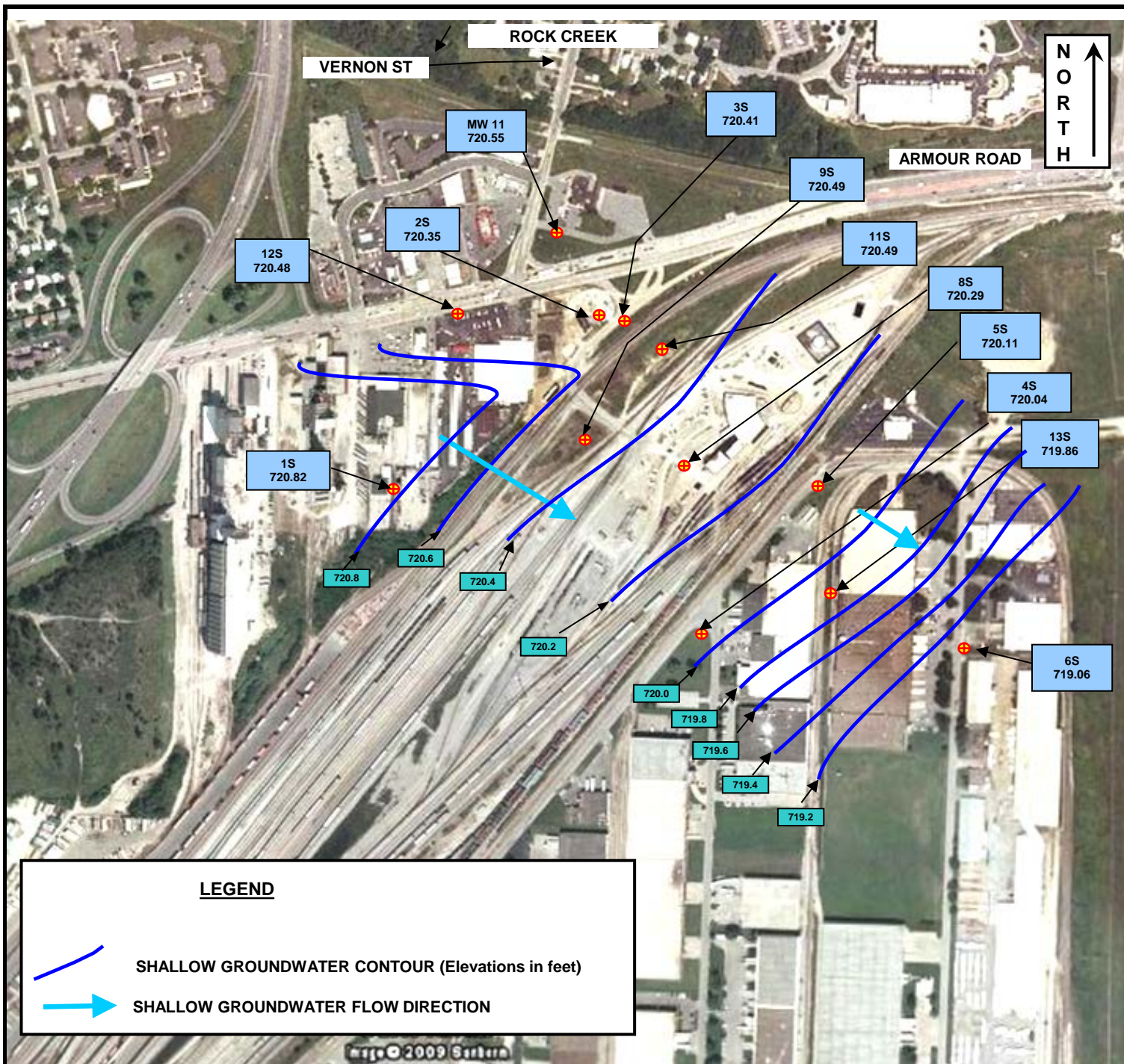
**RIO TINTO
LEGACY
MANAGEMENT**

**Rio Tinto Legacy
Management**
4700 Daybreak Parkway
South Jordan, Utah 84095

2251 Armour Road Site
North Kansas City, Missouri

Scale: Not To scale

Date: 08/22/2012
Drawn By: RVO
Checked By: GP
File Number:



Aerial Photograph derived from Google Earth

FIGURE 4: GROUNDWATER CONTOURS WATER TABLE - NOVEMBER 11, 2014

2251 ARMOUR ROAD
NORTH KANSAS CITY, MISSOURI

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4700 Daybreak Parkway
South Jordan, Utah 84095

DATE: 11/26/2014

DRAWN BY: RVO

CHECKED BY: GP

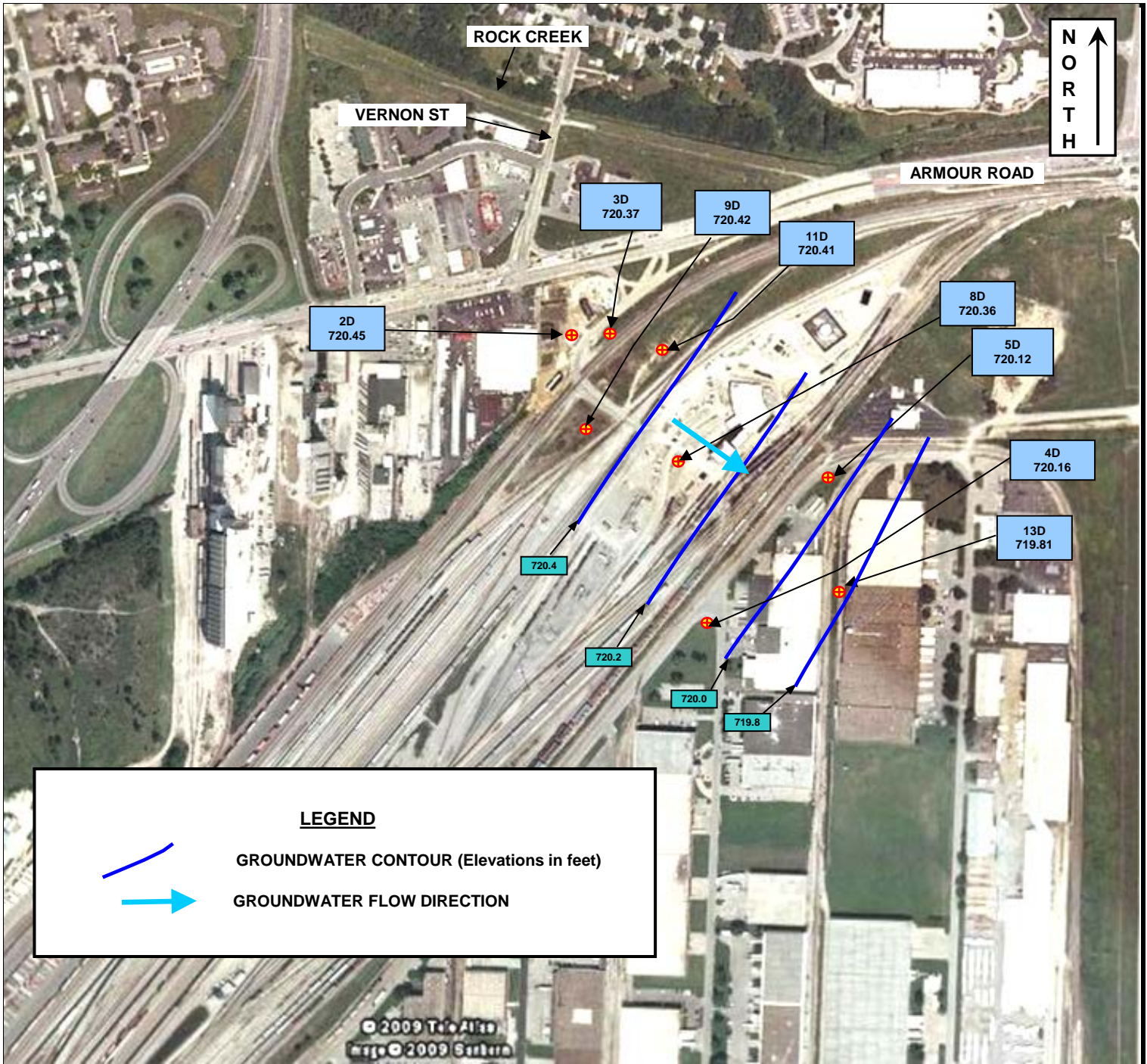
FILE NO:

JOB NUMBER:

SCALE: 1 inch = approximately 575 feet

FIGURE NO:

SHEET 1 OF 1



Aerial Photograph derived from Google Earth

FIGURE 5: DEEP INTERVAL GROUNDWATER CONTOURS

NOVEMBER 11, 2014

2251 ARMOUR ROAD
NORTH KANSAS CITY, MISSOURI

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Rio Tinto Legacy
Management
4700 Daybreak Parkway
South Jordan, Utah 84095

DATE: 11/26/2014

DRAWN BY: RVO

CHECKED BY: GP

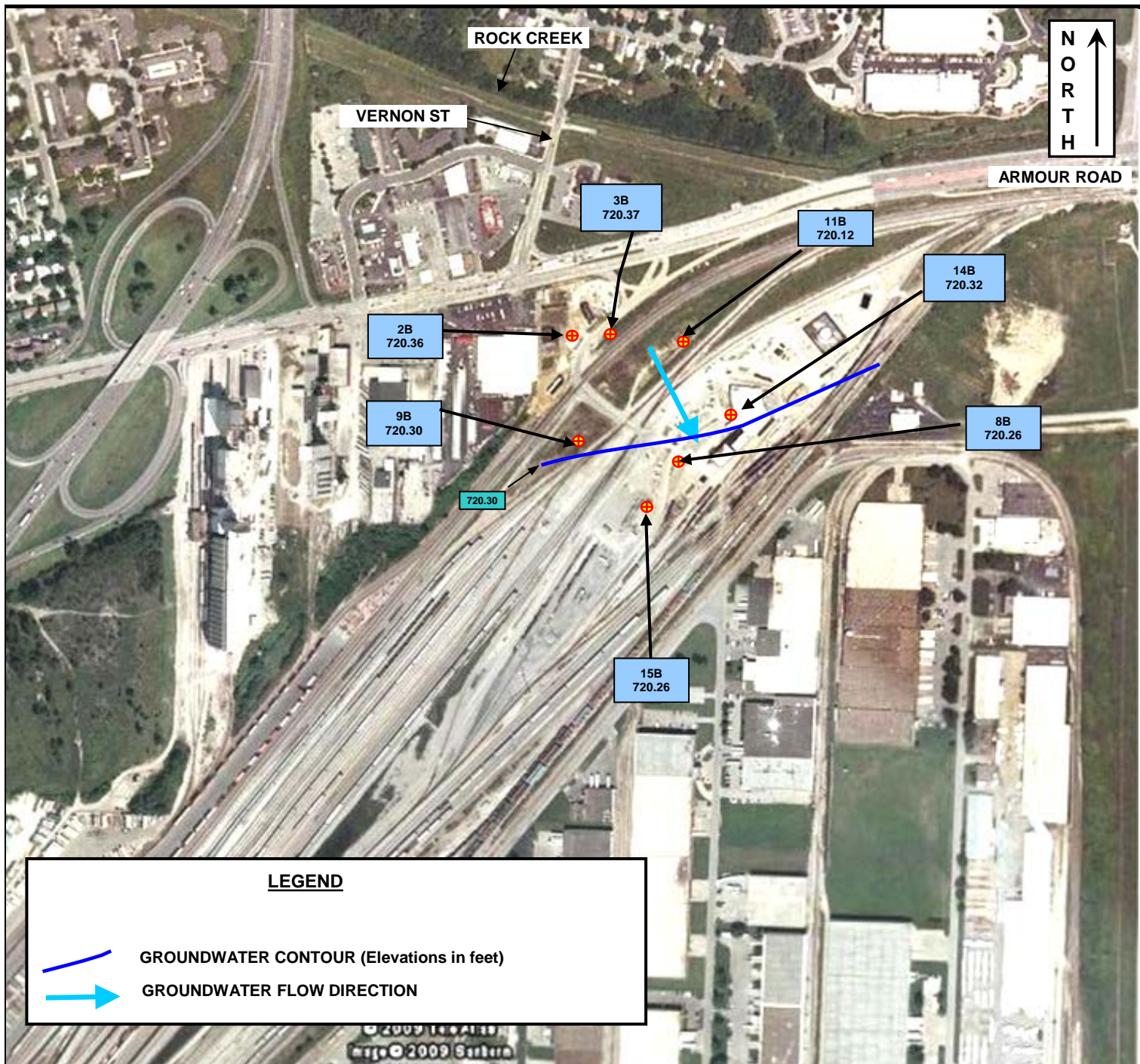
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SCALE: 1 inch = approximately 575 feet

FIGURE NO:

SHEET 1 OF 1



Aerial Photograph derived from Google Earth

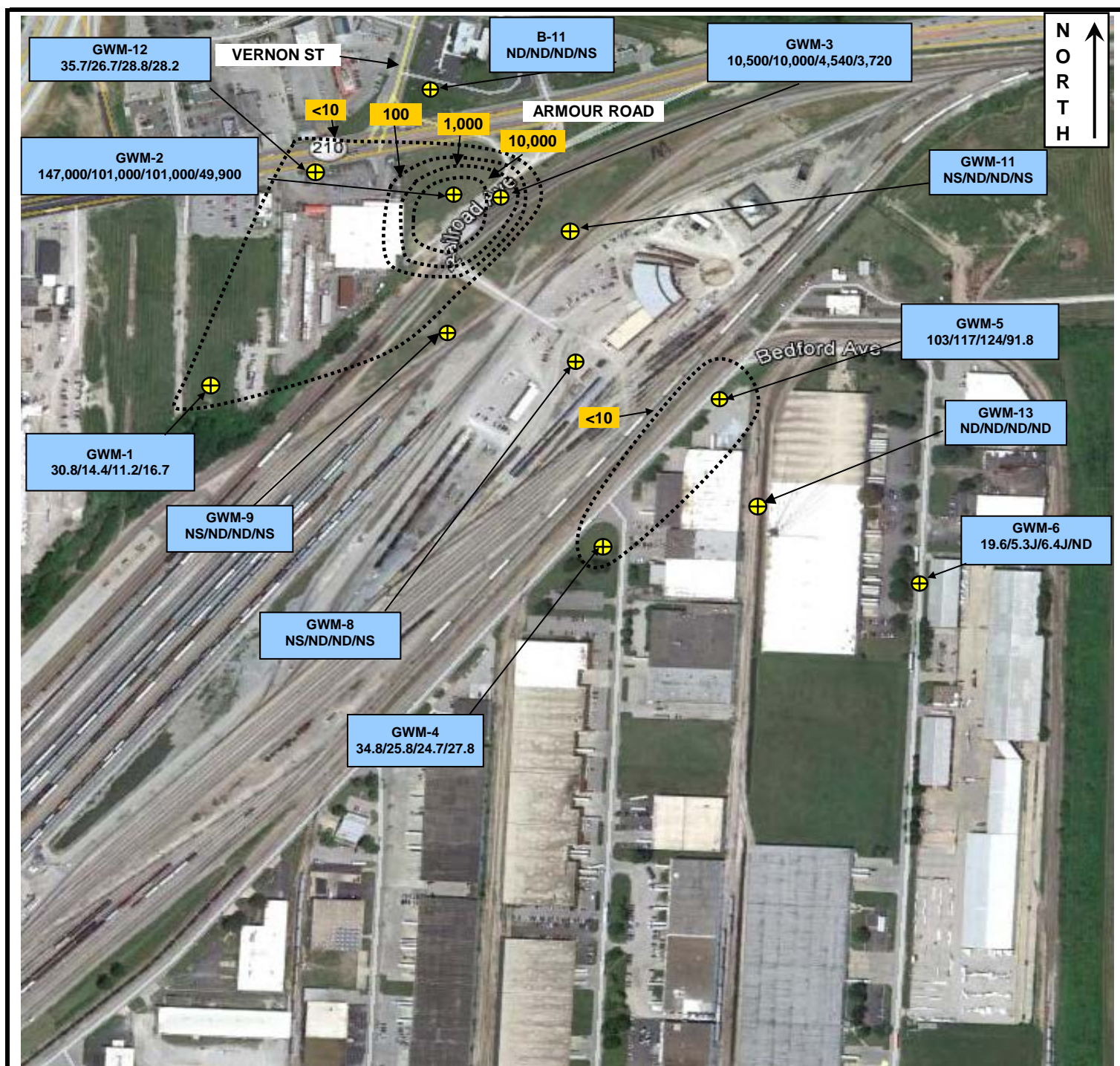
FIGURE 6: BEDROCK INTERFACE GROUNDWATER CONTOURS

NOVEMBER 11, 2014
2251 ARMOUR ROAD SITE
 NORTH KANSAS CITY, MISSOURI

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| | |
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| DATE: 11/26/2014 | JOB NUMBER: |
| DRAWN BY: RVO | SCALE: 1 inch = approximately 575 feet |
| CHECKED BY: GP | FIGURE NO: |
| FILE NO: | SHEET 1 OF 1 |



LEGEND

100

ARSENIC CONCENTRATION ug/L



WATER TABLE ARSENIC CONTOUR

GWM-1
30.8/14.4/11.2/16.7

Well ID

January/July/October 2013/November 2014

Arsenic Concentration ug/l

J : value estimated less than reporting limit

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4700 Daybreak Parkway
South Jordan, Utah 84095

FIGURE 7: ARSENIC CONCENTRATIONS WATER TABLE NOVEMBER 2014

2251 ARMOUR ROAD SITE
NORTH KANSAS CITY, MISSOURI

DATE DRAWN: 1/17/2015

JOB NUMBER:

DRAWN BY: RVO

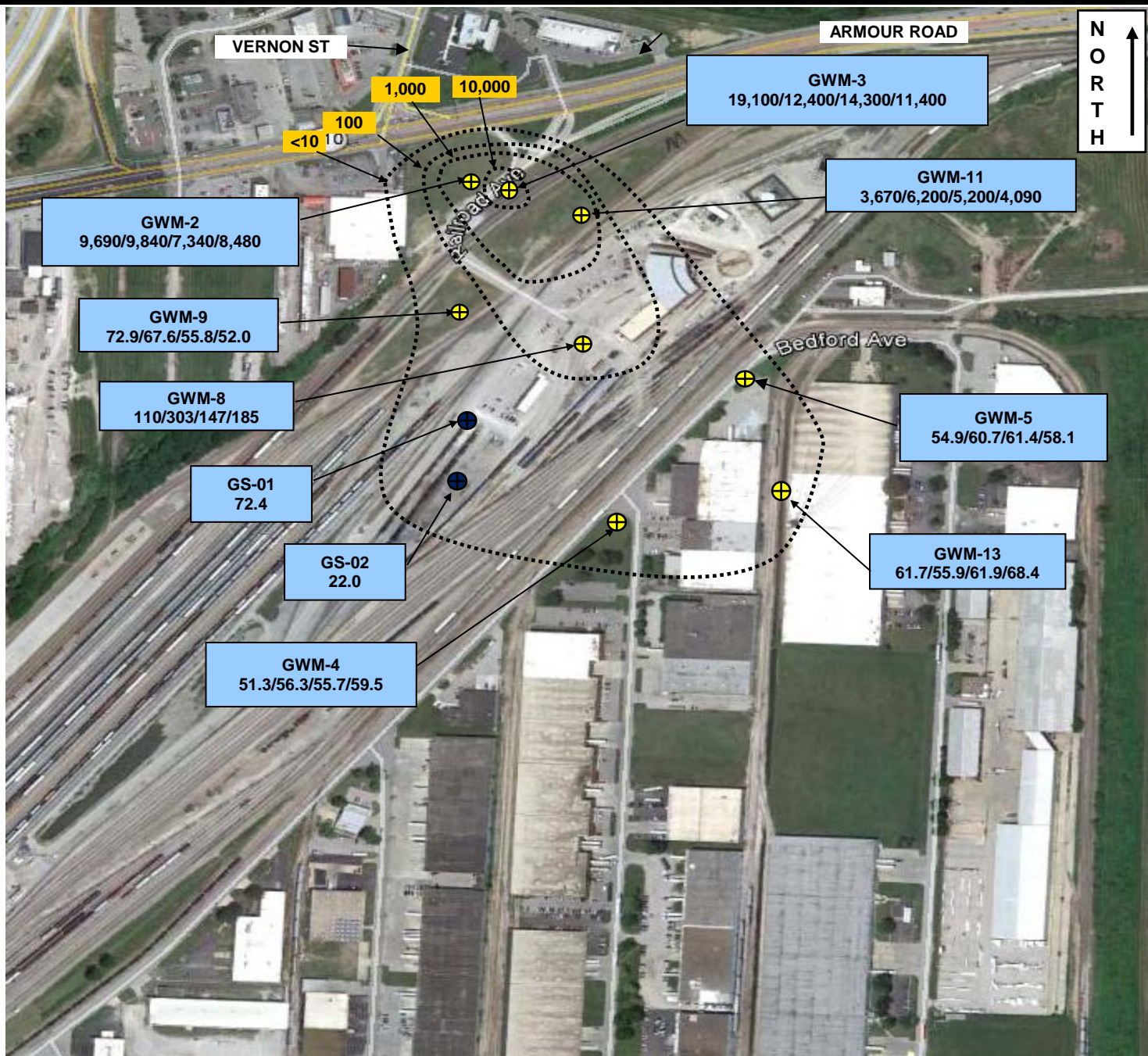
SCALE: 1 inch = approximately 575 feet

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FIGURE NO:

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SHEET 1 OF 1



LEGEND

- 100** ARSENIC CONCENTRATION ug/L
- DEEP INTERVAL ARSENIC CONTOUR**
- MAY 2012 NS GRAB SAMPLE**

GWM-4
51.3/56.3/55.7/59.5

Well ID
January/July/October 2013/November 2014
Arsenic Concentration ug/l

J : value estimated less than reporting limit

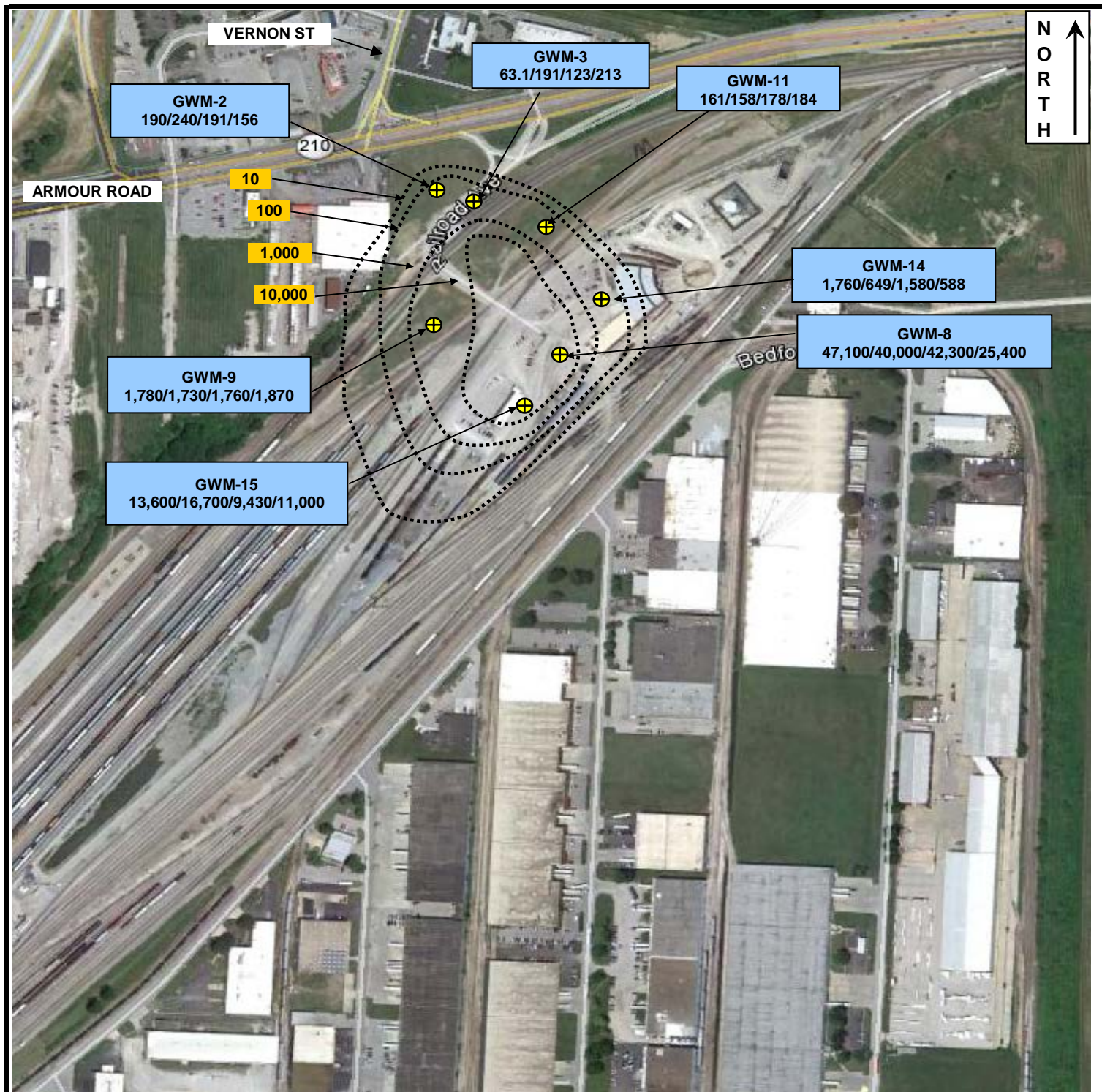
FIGURE 8: ARSENIC CONCENTRATIONS DEEP INTERVAL NOVEMBER 2014

2251 ARMOUR ROAD
NORTH KANSAS CITY, MISSOURI

| | |
|------------------------|--|
| DATE DRAWN: 12/17/2014 | JOB NUMBER: |
| DRAWN BY: RVO | SCALE: 1 inch = approximately 575 feet |
| CHECKED BY: GP | FIGURE NO: |
| FILE NO: | SHEET 1 OF 1 |

**RIO TINTO
LEGACY
MANAGEMENT**

Rio Tinto Legacy
Management
4700 Daybreak Parkway
South Jordan, Utah 84095



LEGEND

100

ARSENIC CONCENTRATION ug/L



ARSENIC CONCENTRATION CONTOUR

GWM-11
161/158/178/184

Well ID

January/July/October 2013/November 2014
Arsenic Concentration ug/l

FIGURE 9: ARSENIC CONCENTRATIONS BEDROCK INTERVAL NOVEMBER 2014

2251 ARMOUR ROAD SITE
NORTH KANSAS CITY, MISSOURI

**RIO TINTO
LEGACY
MANAGEMENT**

Rio Tinto Legacy
Management
4700 Daybreak Parkway
South Jordan, Utah 84095

DATE DRAWN 12/19/14

DRAWN BY: RVO

CHECKED BY: GP

FILE NO:

JOB NUMBER:

SCALE: 1 inch = approximately 575 feet

FIGURE NO:

SHEET 1 OF 1

TABLES

Table 1
ANALYTICAL SCHEDULE

| Sample Type | Analytical Method | Target Constituent | Sampling Schedule |
|---------------|--------------------------------|--|--|
| Water Samples | SW846-3050B/6010C | Total Arsenic/ Filtered Arsenic | Annual all wells |
| | SW846-7062 | Total Arsenic/ Filtered Arsenic | Once November 2014 <i>Completed November 2014</i> |
| | SW846-3050B/6010 | Total Metals | Twice, once Summer once Winter – Wells GWM-12S, GWM 10 S,D,B, GWM 13 S, D <i>Last round April 2011</i> |
| | SW846—9056A | General Inorganic Anions (Chloride, fluoride, bromide, nitrate, nitrite, phosphate, sulfate) | Quarterly All wells <i>Last Round April 2011</i> |
| | SW846-9060A | Total Organic Carbon | Quarterly All wells <i>Last Round April 2011</i> |
| | EPA-160.1 | Total Dissolved Solids | Quarterly All wells <i>Last Round April 2011</i> |
| | SW846-By Calculation from 6010 | Hardness | Quarterly All wells <i>Last Round April 2011</i> |

Table 1
ANALYTICAL SCHEDULE (Cont.)

| Sample Type | Analysis | Analytical Method | Sampling Schedule |
|---------------------------|---|---|---------------------------------------|
| Water Analyses for the FS | 8260B | Aromatic and chlorinated volatile organics; | January 2013 Round <i>Complete</i> |
| | 8270C | Semi volatile organic compounds; | |
| | 8015B | Total Petroleum Hydrocarbons in the gasoline and mid diesel range | |
| | 1664A | Oil and grease | |
| Soil and Water IDW | SW846-1311/6010C SW-846 Method 1010 SW-846 Method 9095B | TCLP Arsenic Flash Point Paint Filter | As Produced |

Table 2
Water Level Measurements and Elevations

| Well Identification | Casing Elevation (MSL) | 11-Nov-14 | |
|---------------------|------------------------|----------------------|-----------------------|
| | | Depth to Groundwater | Water Elevation (MSL) |
| GWM-01S | 739.82 | 19.00 | 720.82 |
| GWM-02S | 739.81 | 19.46 | 720.35 |
| GWM-02D | 739.94 | 19.49 | 720.45 |
| GWM-02B | 739.65 | 19.29 | 720.36 |
| GWM-03S | 742.13 | 21.72 | 720.41 |
| GWM-03D | 742.01 | 21.64 | 720.37 |
| GWM-03B | 742.10 | 21.73 | 720.37 |
| GWM-04S | 733.82 | 13.78 | 720.04 |
| GWM-04D | 733.88 | 13.72 | 720.16 |
| GWM-05S | 735.60 | 15.49 | 720.11 |
| GWM-05D | 735.85 | 15.73 | 720.12 |
| GWM-06S | 737.80 | 18.74 | 719.06 |
| GWM-08S | 742.51 | 22.22 | 720.29 |
| GWM-08D | 742.76 | 22.40 | 720.36 |
| GWM-08B | 742.54 | 22.28 | 720.26 |
| GWM-09S | 733.47 | 12.98 | 720.49 |
| GWM-09D | 733.83 | 13.41 | 720.42 |
| GWM-09B | 733.50 | 13.20 | 720.30 |
| GWM-11S | 736.08 | 15.59 | 720.49 |
| GWM-11D | 736.07 | 15.66 | 720.41 |
| GWM-11B | 735.76 | 15.64 | 720.12 |
| GWM-12S | 740.82 | 20.34 | 720.48 |
| GWM-13S | 731.72 | 11.86 | 719.86 |
| GWM-13D | 731.70 | 11.89 | 719.81 |
| GWM-14B | 743.93 | 23.61 | 720.32 |
| GWM-15B | 741.43 | 21.17 | 720.26 |
| MW-11 | 740.51 | 19.96 | 720.55 |
| AVERAGE | | | 720.26 |

Table 3
Field and Equipment Blanks
(Results µg/L)

| Parameter | Field Blank November 12, 2014 | Field Blank November 13, 2014 | Method 7062 Field Blank November 12, 2014 | Equipment Blank November 14, 2014 | Equipment Blank November 17, 2014 |
|------------------|--|--|--|--|--|
| Arsenic | ND | ND | ND | ND | ND |

ND = Not Detected

Table 4
Duplicate Analyses Groundwater
(All Dissolved - Results µ/L)

| Parameter | METHOD 7062 | | | | | | METHOD 6010 | | | | | |
|-----------|------------------|----------------------|------|----------------------|--------------------------|-------|-------------------|--------------------------|-------|----------------------|-----------------------------|------|
| | GWM-08B Total | GWM-08B Total Dup | RPD | GWM-08B Dissolved | GWM-08B Dissolved Dup | RPD | GWM- 02B Total | GWM- 02B Total Dup | RPD | GWM-02B Dissolved | GWM-02B Dissolved Dup | RPD |
| Arsenic | 24,000 | 23,900 | 0.42 | 23,300 | 28,200 | 19.03 | 121 | 151 | 22.06 | 156 | 151 | 3.26 |

| Parameter | METHOD 6010 | | | | | |
|-----------|------------------|----------------------|------|----------------------|--------------------------|-------|
| | GWM-08B Total | GWM-08B Total Dup | RPD | GWM-08B Dissolved | GWM-08B Dissolved Dup | RPD |
| Arsenic | 24,800 | 22,800 | 8.40 | 21,000 | 25,400 | 18.97 |

Table 5
Laboratory QA/QC

| Parameter | ALS December 11 Lab Report | ALS December 12 Lab Report | Test America December 11 Lab Report | Test America December 18 Lab Report |
|---|--|--|--|--|
| Laboratory Blanks | All < Reporting Limits | All < Reporting Limits | All < Reporting Limits | All < Reporting Limits |
| Laboratory Control Spikes (LCS) | All Recoveries within limits, 96% | All Recoveries within acceptable range. | All Recoveries 95% to 105%; within acceptable range | All Recoveries 97% to 100%; within acceptable range |
| Laboratory Control Spikes Duplicates (LCSD) | Not run | Not run | RPD of 1. | All Recoveries within limits. Recovery range 98-102%. RPDs 1-2. |
| Matrix Spike/Matrix Spike Duplicates (MS/MSD) | Matrix Spike not valid due to high arsenic concentration in native sample. | Matrix Spike not valid due to high arsenic concentration in native sample. | Matrix Spike not valid due to high arsenic concentration in native sample. | Matrix Spike not valid due to high arsenic concentration in native sample. |
| Temperature of cooler at receipt | -0.3° C | 0.6° C | 1.6° C | 0.2° C |
| QA/QC effect on Samples Analyzed | Data are of sufficient quality | Data are of sufficient quality. | Data are of sufficient quality | Data are of sufficient quality |

Table 7
Data Assessment Analytical Methods 6010 and Method 7062
(All Dissolved - Results µ/L)

| Well | Method 6010 Total | Method 7062 Total | RPD Totals | Method 6010 Dissolved | Method 7062 Dissolved | RPD Dissolved |
|---------|----------------------|----------------------|------------|--------------------------|--------------------------|---------------|
| GWM-02B | 121 | 123 | 1.64 | 156 | 136 | 13.70 |
| GWM-04S | 29.30 | 31.6 | 7.55 | 27.80 | 23.2 | 18.04 |
| GWM-04D | 62.80 | 64.6 | 2.83 | 59.50 | 57.1 | 4.12 |
| GWM-05S | 92.80 | 46.2 | 67.05 | 91.80 | 42.9 | 72.61 |
| GWM-05D | 57.70 | 58.5 | 1.38 | 58.10 | 51.9 | 11.27 |
| GWM-06S | 51.60 | 31.9 | 47.19 | ND* | ND* | 0.00 |
| GWM-08B | 24800 | 24000 | 3.28 | 21000 | 23300 | 10.38 |
| GWM-13D | 75.40 | 39.2 | 63.18 | 68.40 | 31 | 75.25 |

* Less than Reporting Level

BOLD = 7062 provides a significantly lower value

Table 8
Investigation Derived Waste
(Results ug/L)

| Parameter | Tank 1 | Tank 2 | Tank 3 | Tank 4 | Tank 5 | TOTE |
|---------------------|--------|--------|--------|--------|--------|----------------------------|
| Arsenic - June 2013 | Empty | Empty | Empty | Empty | Empty | TBD |
| Quantity (gallons) | | | | | | 30 |
| Flash Point | | | | | | >200 |
| Paint Filter | | | | | | Fail, Needs solidification |
| Intended Disposal | | | | | | EQ Detroit |

Notes

Limit is for hazardous classification is TCLP of 5 mg/L (5,000 ug/L).
Solidify to pass the paint filter then Subtitle D disposal.

Tank Locations within Fenced in Area

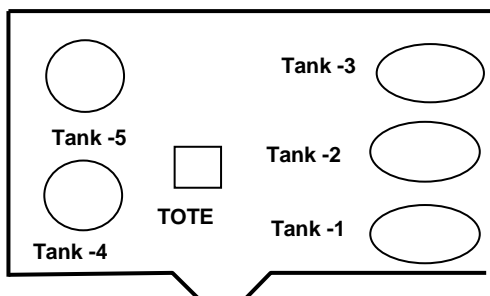


Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Cholorphenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|----------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| MDNR-B1 ¹ | September 1995 | 134 | NA | ND | NA | NA | NA |
| MDNR-B1 | August 1999 | 46.5 | 6.9 | NA | NA | NA | NA |
| B-11 | July 6, 2007 | ND | NA | ND | ND | ND | ND |
| B-11 | July 6, 2007 (DUP) | ND | NA | ND | ND | ND | ND |
| B-11 | January 25, 2008 | 12.4 | ND | ND | ND | ND | ND |
| B-11 | September 21, 2008 | ND | ND | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| B-11 | February 17, 2009 | 11.3 | ND | | | | |
| B-11 | July 28, 2009 | 12.3 | ND | | | | |
| B-11 | February 3, 2010 | ND | ND | | | | |
| B-11 | July, 14,2010 | ND | ND | | | | |
| B-11 | October 5, 2010 | ND | ND | | | | |
| B-11 | January 19, 2011 | 8.4 J | ND | | | | |
| B-11 | April 5, 2011 | 5.4 J | ND | | | | |
| B-11 | July 20, 2011 | ND | ND | | | | |
| B-11 | October 4, 2011 | ND | ND | | | | |
| B-11 | February 2, 2012 | ND | ND | | | | |
| B-11 | April 6, 2012 | ND | ND | | | | |
| B-11 | July 13, 2012 | ND | ND | | | | |
| B-11 | January 14, 2013 | ND | ND | | | | |
| B-11 | June 28, 2013 | ND | ND | | | | |
| B-11 | October 25, 2013 | ND | ND | | | | |
| B-11 | July 22, 2014 | NS | NS | | | | |
| | NOT SAMPLED NOV 14 | | | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|----------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| PC-1 ² | September 1995 | 150 | NA | NA | NA | NA | NA |
| Piez-09 ² | October 21-25 1997 | 234 | NA | NA | NA | NA | NA |
| GWM-01S | July 5, 2007 | 19.6 | NA | ND | ND | ND | ND |
| GWM-01S | January 25, 2008 | 117 | 27.8 | ND | ND | ND | ND |
| GWM-01S | September 21, 2008 | 33.3 | 11.8 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-01S | February 17, 2009 | 196 | ND | | | | |
| GWM-01S | July 28, 2009 | 56.9 | 17.9 | | | | |
| GWM-01S | February 3, 2010 | 63.7 | 21.3 | | | | |
| GWM-01S | July 14, 2010 | 66.2 | ND | | | | |
| GWM-01S | October 5, 2010 | 41.6 | 19.2 | | | | |
| GWM-01S | January 25, 2011 | 231 | 10.7 | | | | |
| GWM-01S | April 5, 2011 | 25.7 | 16.9 | | | | |
| GWM-01S | July 19, 2011 | 16.2 | 13.6 | | | | |
| GWM-01S | October 4, 2011 | 30.8 | 19.0 | | | | |
| GWM-01S | January 31, 2012 | 29.8 | 18.8 | | | | |
| GWM-01S | April 6, 2012 | 25.8 | 18.6 | | | | |
| GWM-01S | July 13, 2012 | 18.8 | 18.8 | | | | |
| GWM-01S | January 14, 2013 | 49.1 | 30.8 | | | | |
| GWM-01S | June 28, 2013 | 21.5 | 14.4 | | | | |
| GWM-01S | October 21, 2013 | 16.5 | 11.2 | | | | |
| GWM-01S | July 22, 2014 | NS | NS | | | | |
| GWM-01S | November 12, 2014 | 93.1 | 16.7 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|----------------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| MW-10 ³ | September 1995 | 362,000 | NA | NA | NA | NA | NA |
| MW-10 | August 1999 | 415,000 | 396,000 | 49.7 | NA | NA | NA |
| GWM-02S | July 6, 2007 | 249,000 | NA | ND | ND | ND | ND |
| GWM-02S | January 26, 2008 | 254,000 | 232,000 | ND | ND | ND | ND |
| GWM-02S | September 21, 2008 | 170,000 | 73,200 | ND | ND | ND | ND |
| GWM-02S | February 18, 2009 | 250,000 | 209,000 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-02S Dup | February 18, 2009 | 251,000 | 196,000 | | | | |
| GWM-02S | July 28, 2009 | 104,000 | 98,000 | | | | |
| GWM-02S Dup | July 28, 2009 | 100,000 | 97,500 | | | | |
| GWM-02S | February 4, 2010 | 212,000 | ND | | | | |
| GWM-02S Reanalyze | February 26, 2010 | NA | 270,000 | | | | |
| GWM-02S Resam. FF | March 4, 2010 | 197,000 | 203,000 | | | | |
| GWM-02S Resam. Lab Fil. | March 4, 2010 | NA | 209,000 | | | | |
| GWM-02S | July 16, 2010 | 60,200 | 59,800 | | | | |
| GWM-02S | October 8, 2010 | 39,400 | 43,700 | | | | |
| GWM-02S | January 19, 2011 | 63,800 | 58,400 | | | | |
| GWM-02S Dup | January 19, 2011 | 63,600 | 60,600 | | | | |
| GWM-02S | April 8, 2011 | 53,800 | 51,200 | | | | |
| GWM-02S | July 25, 2011 | 46,400 | 42,200 | | | | |
| GWM-02S | October 7, 2011 | 121,000 | 128,000 | | | | |
| GWM-02S | February 2, 2012 | 162,000 | 171,000 | | | | |
| GWM-02S | April 10, 2012 | 155,000 | 136,000 | | | | |
| GWM-02S | July 13, 2012 | 183,000 | 175,000 | | | | |
| GWM-02S | January 14, 2013 | 130,000 | 147,000 | | | | |
| GWM-02S | July 8, 2013 | 111,000 | 102,000 | | | | |
| GWM-02S Dup | July 8, 2013 | 101,000 B | 101,000 | | | | |
| GWM-02S | October 23, 2013 | 107,000 | 101,000 | | | | |
| GWM-02S | July 23, 2014 | 70,900 | 76,500 | | | | |
| GWM-02S | November 12, 2014 | 4,010 | 3,870 | | | | |
| GWM-02S | December 22, 2014 | 25,500 | 20,400 | | | | |
| GWM-02S | December 23, 2014 | 43,200 | 49,900 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|--|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| GWM-02D | July 6, 2007 | 158,000 | NA | ND | ND | ND | ND |
| GWM-02D | January 26, 2008 | 62,600 | 61,900 | ND | ND | ND | ND |
| GWM-02D DUP | January 26, 2008 | 52,000 | 62,200 | ND | ND | ND | ND |
| GWM-02D | September 21, 2008 | 121,000 | 59,400 | ND | ND | ND | ND |
| GWM-02D | February 18, 2009 | 86,400 | 88,900 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-02D | July 28, 2009 | 65,600 | 64,600 | | | | |
| GWM-02D | February 4, 2010 | 31,700 | 32,400 | | | | |
| GWM-02D Resampled Field Filtered | March 4, 2010 | 34,000 | 29,900 | | | | |
| GWM-02D Resampled Lab Filtered | March 4, 2010 | NA | 13,800 | | | | |
| GWM-02D | July 16, 2010 | 46,200 | 32,000 | | | | |
| GWM-02D | October 8, 2010 | 42,400 | 43,600 | | | | |
| GWM-02D | January 21, 2011 | 24,100 | 26,000 | | | | |
| GWM-02D | April 8, 2011 | 30,700 | 26,100 | | | | |
| GWM-02D | July 25, 2011 | 31,600 | 28,600 | | | | |
| GWM-02D | October 7, 2011 | 27,800 | 28,300 | | | | |
| GWM-02D | February 6, 2012 | 19,400 | 16,800 | | | | |
| GWM-02D | April 10, 2012 | 16,400 | 14,500 | | | | |
| GWM-02D | July 13, 2012 | 11,900 | 11,800 | | | | |
| GWM-02D | January 14, 2013 | 9,190 | 9,690 | | | | |
| GWM-02D | July 8, 2013 | 9,610 | 9,840 | | | | |
| GWM-02D | October 23, 2013 | 7,530 | 7,340 | | | | |
| GWM-02D | July 23, 2014 | 9,999 | 8,500 | | | | |
| GWM-02D | November 12, 2014 | 7,330 | 8,480 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| GWM-02B | July 6, 2007 | 605 | NA | ND | ND | ND | ND |
| GWM-02B | January 26, 2008 | 567 | 580 | 2.56 | ND | ND | ND |
| GWM-02B | September 21, 2008 | 500 | 489 | ND | ND | ND | ND |
| GWM-02B | February 18, 2009 | 332 | 339 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-02B | July 28, 2009 | 405 | 396 | | | | |
| GWM-02B | February 4, 2010 | 303 | 332 | | | | |
| GWM-02B | July 16, 2010 | 368 | 31.9 | | | | |
| GWM-02B | October 8, 2010 | 328 | 329 | | | | |
| GWM-02B | January 19, 2011 | 252 | 255 | | | | |
| GWM-02B | April 8, 2011 | 262 | 262 | | | | |
| GWM-02B | July 25, 2011 | 355 | 322 | | | | |
| GWM-02B | October 7, 2011 | 295 | 306 | | | | |
| GWM-02B | February 2, 2012 | 238 | 246 | | | | |
| GWM-02B | April 10, 2012 | 223 | 199 | | | | |
| GWM-02B | July 13, 2012 | 229 | 217 | | | | |
| GWM-02B | January 14, 2013 | 178 | 190 | | | | |
| GWM-02B | July 3, 2013 | 227 | 240 | | | | |
| GWM-02B | October 23, 2013 | 204 | 191 | | | | |
| GWM-02B | July 23, 2014 | 225 | 235 | | | | |
| GWM-02B | November 14, 2014 | 121 | 156 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| NS-2 ⁴ | September 1995 | 138,000 | NA | NA | NA | NA | NA |
| GP-6 ⁵ | October 21-25 1997 | 49,000 | NA | NA | NA | NA | NA |
| GWM-03S | July 6, 2007 | 7,220 | NA | ND | ND | ND | ND |
| GWM-03S | January 26, 2008 | 7,600 | 8,040 | ND | ND | ND | ND |
| GWM-03S | September 21, 2008 | 3,780 | 6,370 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-03S | February 17, 2009 | 7,040 | 6,680 | | | | |
| GWM-03S | July 28, 2009 | 6,010 | 7,990 | | | | |
| GWM-03S | February 4, 2010 | 7,220 | 7,280 | | | | |
| GWM-03S | July 15, 2010 | 3,950 | 960 | | | | |
| GWM-03S | October 7, 2010 | 5,760 | 6,000 | | | | |
| GWM-03S | January 26, 2011 | 9,550 | 9,890 | | | | |
| GWM-03S | April 11, 2011 | 16,800 | 15,500 | | | | |
| GWM-03S | July 25, 2011 | 5,950 | 4,680 | | | | |
| GWM-03S | October 6, 2011 | 8,250 | 8,310 | | | | |
| GWM-03S | February 6, 2012 | 17,500 | 12,300 | | | | |
| GWM-03S | April 11, 2012 | 16,200 | 16,700 | | | | |
| GWM-03S | July 19, 2012 | 13,500 | 13,000 | | | | |
| GWM-03S | January 11, 2013 | 9,880 | 10,100 | | | | |
| GWM-03S DUP | January 11, 2013 | 9,850 | 10,500 | | | | |
| GWM-03S | July 8, 2013 | 11,400 | 10,000 | | | | |
| GWM-03S | October 28, 2013 | 4,270 | 4,540 | | | | |
| GWM-03S | July 23, 2014 | 2,790 | 2,890 | | | | |
| GWM-03S | November 12, 2014 | 3,850 | 3,720 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|-----------------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| GP-6 ⁵ | October 21-25 1997 | 176,000 | NA | NA | NA | NA | NA |
| GWM-03D | July 6, 2007 | 10,400 | NA | ND | ND | ND | ND |
| GWM-03D | January 26, 2008 | 9,900 | 9,970 | ND | ND | ND | ND |
| GWM-03D | September 21, 2008 | 9,410 | 9,530 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-03D | February 18, 2009 | 8,340 | 8,380 | | | | |
| GWM-03D | July 28, 2009 | 7,430 | 8,570 | | | | |
| GWM-03D | February 4, 2010 | 8,520 | 9,210 | | | | |
| GWM-03D | July 15, 2010 | 13,000 | 5,160 | | | | |
| GWM-03D | October 7, 2010 | 10,100 | 10,800 | | | | |
| GWM-03D | January 26, 2011 | 13,100 | 14,900 | | | | |
| GWM-03D | April 11, 2011 | 13,200 | 12,100 | | | | |
| GWM-03D | July 25, 2011 | 11,100 | 10,800 | | | | |
| GWM-03D | October 6, 2011 | 14,900 | 14,900 | | | | |
| GWM-03D | February 6, 2012 | 19,300 | 17,000 | | | | |
| GWM-03D | April 11, 2012 | 19,100 | 23,700 | | | | |
| GWM-03D | July 19, 2012 | 21,100 | 19,000 | | | | |
| GWM-03D | January 11, 2013 | 21,300 | 19,100 | | | | |
| GWM-03D | July 8, 2013 | 12,100 | 12,400 | | | | |
| GWM-03D | October 25, 2013 | 14,200 | 14,300 | | | | |
| GWM-03D | July 23, 2014 | 3,670 | 7,890 | | | | |
| GWM-03D | Resample August 18, 2014 | 12,300 | 11,800 | | | | |
| GWM-03D | November 12, 2014 | 8,730 | 11,400 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| GWM-03B | July 6, 2007 | 4,430 | NA | ND | ND | ND | ND |
| GWM-03B | January 26, 2008 | 66.6 | 68.3 | ND | ND | ND | ND |
| GWM-03B | September 21, 2008 | 70.0 | 73.0 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-03B | February 18, 2009 | 56.9 | 50.1 | | | | |
| GWM-03B | July 28, 2009 | 62.2 | 62.3 | | | | |
| GWM-03B | February 4, 2010 | 52.1 | 58.4 | | | | |
| GWM-03B DUP | February 4, 2010 | 48.9 | 55.0 | | | | |
| GWM-03B | July 15, 2010 | 92 | 7.1 | | | | |
| GWM-03B DUP | July 15, 2010 | 92.8 | 8.8 | | | | |
| GWM-03B | October 7, 2010 | 54.4 | 60.8 | | | | |
| GWM-03B | January 26, 2011 | 53.5 | 55.5 | | | | |
| GWM-03B | April 11, 2011 | 62.1 | 67.5 | | | | |
| GWM-03B | July 25, 2011 | 181 | 162 | | | | |
| GWM-03B | October 6, 2011 | 163 | 160 | | | | |
| GWM-03B | February 6, 2012 | 68.6 | 69.8 | | | | |
| GWM-03B | April 11, 2012 | 80.9 | 77.8 | | | | |
| GWM-03B | July 19, 2012 | 68.3 | 68.8 | | | | |
| GWM-03B | January 11, 2013 | 49.8 | 63.1 | | | | |
| GWM-03B | July 3, 2012 | 192 | 191 | | | | |
| GWM-03B | October 25, 2013 | 120 | 123 | | | | |
| GWM-03B | July 23, 2014 | 131 | 175 | | | | |
| GWM-03B | November 12, 2014 | 221 | 213 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|-------------------------------|--------------------|-----------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| 16,70707Piez.-03 ⁶ | October 21-25 1997 | 100/240 (19' and 43' depth) | NA | NA | NA | NA | NA |
| GWM-04S | July 5, 2007 | 11.9 | NA | ND | ND | ND | ND |
| GWM-04S | January 25, 2008 | 30 | 32.8 | ND | ND | ND | ND |
| GWM-04S | September 21, 2008 | 12.7 | 13.3 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-04S | February 17, 2009 | 40.8 | 34.6 | | | | |
| GWM-04S | July 28, 2009 | 149 | 16 | | | | |
| GWM-04S | February 3, 2010 | 16.3 | 20.2 | | | | |
| GWM-04S | July 13, 2010 | 11.3 | 5.3 | | | | |
| GWM-04S | October 5, 2010 | 14.6 | 14.6 | | | | |
| GWM-04S | January 18, 2011 | 17.1 | 15.1 | | | | |
| GWM-04S | April 5, 2011 | 14.4 | 13.0 | | | | |
| GWM-04S | July 19, 2011 | 7.8 | 8.4 | | | | |
| GWM-04S DUP | July 19, 2011 | 8.5 | 8.6 | | | | |
| GWM-04S | October 4, 2011 | 14.9 | 14.1 | | | | |
| GWM-04S | January 31, 2012 | 20.5 | 11.8 | | | | |
| GWM-04S | April 6, 2012 | 13.8 | 10.2 | | | | |
| GWM-04S | July 13, 2012 | 17.4 | 22.6 | | | | |
| GWM-04S | January 9, 2013 | 34.1 | 34.8 | | | | |
| GWM-04S | July 1, 2013 | 25.9 | 25.8 | | | | |
| GWM-04S | October 28, 2013 | 31.6 | 24.7 | | | | |
| GWM-04S | July 22, 2014 | 23.2 | 20.2 | | | | |
| GWM-04S | November 12, 2014 | 29.3 | 27.8 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|-----------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| Piez.-03 ⁶ | October 21-25 1997 | 147 | NA | NA | NA | NA | NA |
| GWM-04D | July 5, 2007 | 43.2 | NA | ND | ND | ND | ND |
| GWM-04D | July 5, 2007 DUP | 43.5 | NA | ND | ND | ND | ND |
| GWM-04D | January 25, 2008 | 48.8 | 50.6 | ND | ND | ND | ND |
| GWM-04D | September 21, 2008 | 54.3 | 56.8 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-04D | February 17, 2009 | 57.7 | 56.5 | | | | |
| GWM-04D | July 28, 2009 | 19.1 | ND | | | | |
| GWM-04D | February 3, 2010 | 58.2 | 67.7 | | | | |
| GWM-04D | July 13, 2010 | 53.6 | 13.7 | | | | |
| GWM-04D | October 5, 2010 | 59.2 | 55.1 | | | | |
| GWM-04D | January 18, 2011 | 57.3 | 5.8 J | | | | |
| GWM-04D | April 5, 2011 | 65.4 | 61.4 | | | | |
| GWM-04D Dup | April 5, 2011 | 68.5 | 61.8 | | | | |
| GWM-04D | July 19, 2011 | 57.2 | 49.9 | | | | |
| GWM-04D | October 4, 2011 | 56.5 | 56.5 | | | | |
| GWM-04D | January 31, 2012 | 58.4 | 55.3 | | | | |
| GWM-04D | April 6, 2012 | 58.4 | 64.6 | | | | |
| GWM-04D Dup | April 6, 2012 | 59.5 | 59.3 | | | | |
| GWM-04D | July 13, 2012 | 57.6 | 64.1 | | | | |
| GWM-04D | January 9, 2013 | 52.7 | 51.3 | | | | |
| GWM-04D | July 1, 2013 | 58.6 | 56.3 | | | | |
| GWM-04D | October 28, 2013 | 59.1 | 55.7 | | | | |
| GWM-04D | July 22, 2014 | 88.7 | 57.0 | | | | |
| GWM-04D | November 12, 2014 | 62.8 | 59.5 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|----------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| Piez.-057 | October 21-25 1997 | 154/51 (18' and 25' depth) | NA | NA | NA | NA | NA |
| Piez.-057 | August 17-18 1999 | 198 (25' depth) | 30.3 | NA | NA | NA | NA |
| GWM-05S | July 5, 2007 | 32.5 | NA | ND | ND | ND | ND |
| GWM-05S | January 25, 2008 | 90.6 | 87.9 | ND | ND | ND | ND |
| GWM-05S | September 21, 2008 | 92.0 | 113.0 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-05S | February 17, 2009 | 125 | 80.7 | | | | |
| GWM-05S | July 28, 2009 | 53.0 | 48.8 | | | | |
| GWM-05S | February 3, 2010 | 74.5 | 85.8 | | | | |
| GWM-05S DUP | February 3, 2010 | 74.0 | 82.3 | | | | |
| GWM-05S | July 13, 2010 | 77.2 | 14.2 | | | | |
| GWM-05S | October 5, 2010 | 95.8 | 91.4 | | | | |
| GWM-05S | January 18, 2011 | 85.0 | 81.8 | | | | |
| GWM-05S | April 5, 2011 | 93.9 | 93.0 | | | | |
| GWM-05S | July 19, 2011 | 110 | 102 | | | | |
| GWM-05S | October 3, 2011 | 152 | 139 | | | | |
| GWM-05S | January 31, 2012 | 102 | 105 | | | | |
| GWM-05S | April 6, 2012 | 98.6 | 96.8 | | | | |
| GWM-05S | July 12, 2012 | 129 | 129 | | | | |
| GWM-05S DUP | July 12, 2012 | 132 | 134 | | | | |
| GWM-05S | January 8, 2013 | 95.2 | 102 | | | | |
| GWM-05S DUP | January 8, 2013 | 94.1 | 103 | | | | |
| GWM-05S | July 1, 2013 | 124 | 117 | | | | |
| GWM-05S | October 24, 2013 | 124 | 124 | | | | |
| GWM-05S | July 22, 2014 | 77 | 78 | | | | |
| GWM-05S | November 12, 2014 | 92.8 | 91.8 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| Piez.-057 | October 21-25 1997 | 69.3 | NA | NA | NA | NA | NA |
| GWM-05D | July 5, 2007 | 66.5 | NA | ND | ND | ND | ND |
| GWM-05D | January 25, 2008 | 62.9 | 69.7 | ND | ND | ND | ND |
| GWM-05D | September 21, 2008 | 68.0 | 66.2 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-05D DUP | September 21, 2008 | 64.5 | 67.3 | | | | |
| GWM-05D | February 17, 2009 | 65.4 | 64.8 | | | | |
| GWM-05D | July 28, 2009 | 15.3 | ND | | | | |
| GWM-05D | February 3, 2010 | 66.6 | 74.8 | | | | |
| GWM-05D | July 13, 2010 | 69.4 | 8.5 | | | | |
| GWM-05 DUP | July 13, 2010 | 73.5 | 9.6 | | | | |
| GWM-05D | October 5, 2010 | 72.3 | 68.0 | | | | |
| GWM-05D | January 18, 2011 | 64.1 | 54.4 | | | | |
| GWM-05D | April 5, 2011 | 64.2 | 62.5 | | | | |
| GWM-05D | July 19, 2011 | 69.2 | 62.3 | | | | |
| GWM-05D | October 3, 2011 | 58.9 | 55.8 | | | | |
| GWM-05D | January 31, 2012 | 54.4 | 56.7 | | | | |
| GWM-05D | April 6, 2012 | 57.9 | 55.4 | | | | |
| GWM-05D | July 12, 2012 | 53.5 | 52.5 | | | | |
| GWM-05D | January 8, 2013 | 50.2 | 54.9 | | | | |
| GWM-05D | July 1, 2013 | 61.9 | 60.7 | | | | |
| GWM-05D | October 24, 2013 | 61.2 | 61.4 | | | | |
| GWM-05D | July 22, 2014 | 36.2 | 19.9 | | | | |
| GWM-05D | November 12, 2014 | 57.7 | 58.1 | | | | |
| | | | | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| GWM-06S | July 5, 2007 | ND | NA | ND | ND | ND | ND |
| GWM-06S | January 25, 2008 | 88.6 | 15.6 | ND | ND | ND | ND |
| GWM-06S | September 21, 2008 | 19.3 | ND | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-06S | February 17, 2009 | 53.6 | 14.8 | | | | |
| GWM-06S | July 28, 2009 | 46.1 | ND | | | | |
| GWM-06S | February 3, 2010 | 22.3 | 10.8 | | | | |
| GWM-06S | July 13, 2010 | 12.6 | 4.7 | | | | |
| GWM-06S | October 5, 2010 | 11.1 | 9.0 | | | | |
| GWM-06S | January 18, 2011 | 6.2 J | ND | | | | |
| GWM-06S | April 5, 2011 | 17.3 | 15.4 | | | | |
| GWM-06S | July 19, 2011 | 16.8 | 10.7 | | | | |
| GWM-06S | October 3, 2011 | 12.5 | 10.3 | | | | |
| GWM-06S | January 12, 2012 | 14.9 | ND | | | | |
| GWM-06S | April 6, 2012 | 13.8 | 10.7 | | | | |
| GWM-06S | July 12, 2012 | 13.5 | ND | | | | |
| GWM-06S | January 8, 2013 | 21.6 | 19.6 | | | | |
| GWM-06S | July 1, 2013 | 11.1 | 5.3 J | | | | |
| GWM-06S | October 29, 2013 | 7.7J | 6.4 J | | | | |
| GWM-06S | July 22, 2014 | NS | NS | | | | |
| GWM-06S | November 12, 2014 | 51.6 | ND | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|----------------------|--------------------|--|-----------------------|-------------------------|----------------------|----------------------|----------------------|
| Piez.01 ⁸ | October 21-25 1997 | 28.1 | NA | NA | NA | NA | NA |
| Piez.01 ⁸ | August 17-18 1999 | 89.5 | <2.33 | NA | NA | NA | NA |
| GWM-07S | July 5, 2007 | ND | NA | ND | ND | ND | ND |
| GWM-07S | January 25, 2008 | 76.1 | ND | ND | ND | ND | ND |
| GWM-07S | September 21, 2008 | 22.4 | 16.2 | NA this date forward | NA this date forward | NA this date forward | NA this date forward |
| GWM-07S | February 17, 2009 | 49.3 | ND | | | | |
| GWM-07S | July 28, 2009 | 15.4 | 10.6 | | | | |
| GWM-07S | February 3, 2010 | 14.8 | 15.6 | | | | |
| GWM-07S | July 13, 2010 | 14.8 | 6.8 | | | | |
| GWM-07S | October 5, 2010 | 16.8 | 19.3 | | | | |
| GWM-07S | January 18, 2011 | 16.9 | 15.6 | | | | |
| GWM-07S | April 5, 2011 | 7.5 J | 5.1 J | | | | |
| GWM-07S | July 19, 2011 | 15.7 | 12.0 | | | | |
| GWM-07S | October 3, 2011 | 10.1 | 12.0 | | | | |
| GWM-07S | January 31, 2012 | 17.6 | 18.0 | | | | |
| GWM-07S | April 6, 2012 | 5.1 J | ND | | | | |
| GWM-07S | July 12, 2012 | 24.7 | 18.1 | | | | |
| GWM-07S | January 11, 2013 | Well obstructed at depth, could not sample | | | | | |
| GWM-07S | June 28, 2013 | Well obstructed at depth, could not sample | | | | | |
| GWM-07S | October 23, 2013 | Well obstructed at depth, could not sample | | | | | |
| GW-07S | Well abandoned | Well abandoned January 2014 | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|--------------------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-08S | July 15, 2010 | ND | ND | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-08S | October 7, 2010 | 6.9 | ND | | | | |
| GWM-08S | January 25, 2011 | ND | ND | | | | |
| GWM-8S DUP | January 25, 2011 | ND | ND | | | | |
| GWM-08S | April 11, 2011 | ND | ND | | | | |
| GWM-08S | July 22, 2011 | ND | 7.4 J | | | | |
| GWM-08S | October 6, 2011 | ND | ND | | | | |
| GWM-08S | February 2, 2012 | 10 | 5.2 J | | | | |
| GWM-08S | April 11, 2012 | 12.6 | 6.8 J | | | | |
| GWM-08S | July 19, 2012 | ND | ND | | | | |
| GWM-08S | January 11, 2013 | Insufficient water, could not sample | | | | | |
| GWM-08S | July 9, 2013 | 6 J, B | ND | | | | |
| GWM-08S | October 24, 2013 | ND | ND | | | | |
| GWM-08S | July 22, 2014 | NS | NS | | | | |
| | NOT SAMPLED NOV 14 | | | | | | |
| | | | | | | | |
| GWM-08D | July 15, 2010 | 240 | 28.8 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-08D | October 7, 2010 | 114 | 117 | | | | |
| GWM-08D Dup | October 7, 2010 | 116 | 123 | | | | |
| GWM-08D | January 25, 2011 | 93.2 | 95.6 | | | | |
| GWM-08D | April 11, 2011 | 219 | 130 | | | | |
| GWM-08D | July 22, 2011 | 212 | 187 | | | | |
| GWM-08D | October 6, 2011 | 158 | 157 | | | | |
| GWM-08D | February 2, 2012 | 104 | 106 | | | | |
| GWM-08D Dup | February 2, 2012 | 98.3 | 98.5 | | | | |
| GWM-08D | April 11, 2012 | 133 | 126 | | | | |
| GWM-08D | July 19, 2012 | 98.2 | 101 | | | | |
| GWM-08D | January 15, 2013 | 106 | 110 | | | | |
| GWM-08D | July 8, 2013 | 295 B | 303 | | | | |
| GWM-08D | October 24, 2013 | 152 | 147 | | | | |
| GWM-08D | July 23, 2014 | 160 | 250 | | | | |
| GWM-08D | November 13, 2014 | 166 | 185 | | | | |
| | | | | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|--------------------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-08B | July 15, 2010 | 18,700 | 10,400 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-08B Resample | August 12, 2010 | 14,200 | 7,660 | | | | |
| GWM-08B | October 7, 2010 | 15,200 | 19,200 | | | | |
| GWM-08B | January 25, 2011 | 19,000 | 18,600 | | | | |
| GWM-08B | April 11, 2011 | 16,300 | 14,800 | | | | |
| GWM-08B | July 22, 2011 | 14,700 | 13,600 | | | | |
| GWM-08B | October 6, 2011 | 18,000 | 16,900 | | | | |
| GWM-08B | February 2, 2012 | 21,200 | 23,300 | | | | |
| GWM-08B | April 11, 2012 | 29,300 | 29,000 | | | | |
| GWM-08B | July 19, 2012 | 27,600 | 31,800 | | | | |
| GWM-08B | January 15, 2013 | 40,100 | 47,100 | | | | |
| GWM-08B | July 9, 2013 | 40,000 B | 40,000 | | | | |
| GWM-08B | October 24, 2013 | 39,200 | 42,300 | | | | |
| GWM-08B | July 23, 2014 | 28,600 | 32,900 | | | | |
| GWM-08B | November 17, 2014 | 22,800 | 25,400 | | | | |
| | | | | | | | |
| GWM-09S | July 14, 2010 | 9.5 | ND | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-09S | October 7, 2010 | 7.0 | 7.4 | | | | |
| GWM-09S | January 21, 2011 | 9.2 J | ND | | | | |
| GWM-09S | April 6, 2011 | 4.6 J | ND | | | | |
| GWM-09S | July 21, 2011 | ND | ND | | | | |
| GWM-09S | October 4, 2011 | 16.3 | ND | | | | |
| GWM-09S | February 2, 2012 | ND | ND | | | | |
| GWM-09S | April 10, 2012 | ND | ND | | | | |
| GWM-09S | July 16, 2012 | ND | ND | | | | |
| GWM-09S | January 11, 2013 | Insufficient water, could not sample | | | | | |
| GWM-09S | July 2, 2013 | ND | ND | | | | |
| GWM-09S | October 22, 2013 | ND | ND | | | | |
| GWM-09S | July 22, 2014 | NS | NS | | | | |
| | NOT SAMPLED NOV 14 | | | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|-------------------|-------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-09D | July 14, 2010 | 54.3 | 3.8 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-09D | October 7, 2010 | 49.9 | 55.5 | | | | |
| GWM-09D | January 21, 2011 | 56.9 | 62.8 | | | | |
| GWM-09D | April 6, 2011 | 83.8 | 80.2 | | | | |
| GWM-09D | July 21, 2011 | 74.9 | 60.6 | | | | |
| GWM-09D | October 4, 2011 | 89.6 | 83.6 | | | | |
| GWM-09D | February 2, 2012 | 59.3 | 63.2 | | | | |
| GWM-09D | April 10, 2012 | 82.8 | 72.6 | | | | |
| GWM-09D | July 16, 2012 | 84.3 | 64.9 | | | | |
| GWM-09D | January 16, 2013 | 78.0 | 72.9 | | | | |
| GWM-09D | July 2, 2013 | 63.2 | 67.6 | | | | |
| GWM-09D | October 23, 2013 | 58.8 | 55.8 | | | | |
| GWM-09D | July 23, 2014 | 81.3 | 61.0 | | | | |
| GWM-09D | November 12, 2014 | 51.4 | 52.0 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|-------------------|-------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-09B | January 21, 2011 | 10,300 | 12,600 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-09B | April 6, 2011 | 6,050 | 6,370 | | | | |
| GWM-09B | July 21, 2011 | 7,690 | 6,700 | | | | |
| GWM-09B | October 4, 2011 | 9,550 | 9,120 | | | | |
| GWM-09B | February 2, 2012 | 4,020 | 4,060 | | | | |
| GWM-09B | April 10, 2012 | 3,190 | 3,210 | | | | |
| GWM-09B Dup | April 10, 2012 | 3,230 | 3,150 | | | | |
| GWM-09B | July 16, 2012 | 2,900 | 2,660 | | | | |
| GWM-09B | January 16, 2013 | 1,970 | 1,780 | | | | |
| GWM-09B | July 2, 2013 | 1,530 | 1,730 | | | | |
| GWM-09B | October 23, 2013 | 1,890 | 1,760 | | | | |
| GWM-09B | July 23, 2014 | 1,550 | 1,440 | | | | |
| GWM-09B | November 12, 2014 | 1,840 | 1,870 | | | | |
| | | | | | | | |
| GWM-10S | July 14, 2010 | 4.5 | ND | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-10S | October 6, 2010 | ND | ND | | | | |
| GWM-10S | January 21, 2011 | 7.9 J | ND | | | | |
| GWM-10S | April 8, 2011 | 5 J | ND | | | | |
| GWM-10S | July 20, 2011 | ND | ND | | | | |
| GWM-10S | October 5, 2011 | 5.5 J | 8.8 J | | | | |
| GWM-10S | February 1, 2012 | ND | ND | | | | |
| GWM-10S | April 9, 2012 | 19.9 | ND | | | | |
| | | Well Abandoned May 2012 | | | | | |
| GWM-10D | October 6, 2010 | 1,180 | 1,180 | | | | |
| GWM-10D | January 21, 2011 | 908 | 955 | | | | |
| GWM-10D | April 8, 2011 | 1,670 | 1,680 | | | | |
| GWM-10D | July 20, 2011 | 1,660 | 1,620 | | | | |
| GWM-10D | October 5, 2011 | 1,590 | 1,670 | | | | |
| GWM-10D | February 1, 2012 | 1,150 | 1,210 | | | | |
| GWM-10D | April 9, 2012 | 1,670 | 1,770 | | | | |
| | | Well Abandoned May 2012 | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|------------------|-------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-10DD' | January 24, 2011 | 22,300 | 22,300 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-10DD' | April 8, 2011 | 17,500 | 17,600 | | | | |
| GWM-10DD' | July 21, 2011 | 21,200 | 20,000 | | | | |
| GWM-10DD' | October 5, 2011 | 18,600 | 18,500 | | | | |
| GWM-10DD' | February 1, 2012 | 24,300 | 21,700 | | | | |
| GWM-10DD' | April 9, 2012 | 13,100 | 13,400 | | | | |
| | | Well Abandoned May 2012 | | | | | |
| | | | | | | | |
| | | | | | | | |
| GWM-10B | July 14, 2010 | 1,120 | 142 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-10B | October 10, 2010 | 2,280 | 2,340 | | | | |
| GWM-10B | January 24, 2011 | 4,440 | 5,310 | | | | |
| GWM-10B | April 8, 2011 | 4,550 | 4,580 | | | | |
| GWM-10B | July 21, 2011 | 9,200 | 7,940 | | | | |
| GWM-10B | October 5, 2011 | 8,000 | 8,430 | | | | |
| GWM-10B | February 1, 2012 | 17,400 | 17,100 | | | | |
| GWM-10B | April 9, 2012 | 17,900 | 15,600 | | | | |
| | | Well Abandoned May 2012 | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Cholorphenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|--------------------|--------------------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-11S | July 15, 2010 | ND | ND | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-11S | October 6, 2010 | ND | ND | | | | |
| GWM-11S | January 24, 2011 | ND | ND | | | | |
| GWM-11S | April 6, 2011 | ND | ND | | | | |
| GWM-11S | July 20, 2011 | ND | ND | | | | |
| GWM-11S | October 5, 2011 | ND | ND | | | | |
| GWM-11S | February 1, 2012 | ND | ND | | | | |
| GWM-11S | April 9, 2012 | ND | ND | | | | |
| GWM-11S | July 16, 2012 | ND | ND | | | | |
| GWM-11S | January 11, 2013 | Insufficient water, could not sample | | | | | |
| GWM-11S | July 2, 2013 | 7 J | ND | | | | |
| GWM-11S | October 25, 2013 | ND | ND | | | | |
| GWM-11S | July 22, 2014 | NS | NS | | | | |
| | NOT SAMPLED NOV 14 | | | | | | |
| | | | | | | | |
| GWM-11D | July 15, 2010 | 1,990 | 370 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-11D | October 6, 2010 | 1,790 | 1,610 | | | | |
| GWM-11D Dup | October 6, 2010 | 1,700 | 1,620 | | | | |
| GWM-11D | January 24, 2011 | 1,140 | 1,170 | | | | |
| GWM-11D | April 6, 2011 | 3,280 | 3,320 | | | | |
| GWM-11D | July 20, 2011 | 2,520 | 2,540 | | | | |
| GWM-11D | October 5, 2011 | 2,980 | 3,150 | | | | |
| GWM-11D | February 1, 2012 | 708 | 826 | | | | |
| GWM-11D Dup | February 1, 2012 | 739 | 752 | | | | |
| GWM-11D | April 9, 2012 | 3,740 | 3,460 | | | | |
| GWM-11D | July 16, 2012 | 2,780 | 2,420 | | | | |
| GWM-11D | January 9, 2013 | 3,470 | 3,670 | | | | |
| GWM-11D | July 2, 2013 | 6,080 | 6,200 | | | | |
| GWM-11D | October 24, 2013 | 5,520 | 5,200 | | | | |
| GWM-11D | July 23, 2014 | 2,670 | 1,950 | | | | |
| GWM-11D | November 12, 2014 | 4,040 | 4,090 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|-------------------|-------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-11B | January 24, 2011 | 124 | 134 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-11B | April 6, 2011 | 176 | 182 | | | | |
| GWM-11B | July 20, 2011 | 232 | 228 | | | | |
| GWM-11B | October 5, 2011 | 191 | 203 | | | | |
| GWM-11B Dup | October 5, 2011 | 188 | 202 | | | | |
| GWM-11B | February 1, 2012 | 283 | 291 | | | | |
| GWM-11B | April 11, 2012 | 242 | 248 | | | | |
| GWM-11B | July 16, 2012 | 193 | 179 | | | | |
| GWM-11B | January 9, 2013 | 165 | 161 | | | | |
| GWM-11B | July 2, 2013 | 160 | 158 | | | | |
| GWM-11B Dup | July 2, 2013 | 157 | 157 | | | | |
| GWM-11B | October 24, 2013 | 162 | 178 | | | | |
| GWM-11B | July 23, 2014 | 168 | 175 | | | | |
| GWM-11B | November 12, 2014 | 162 | 184 | | | | |
| | | | | | | | |
| GWM-12S | July 14, 2010 | 25.7 | ND | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-12S | October 6, 2010 | 24.7 | 24.0 | | | | |
| GWM-12S | January 25, 2011 | 31.8 | 29.7 | | | | |
| GWM-12S | April 12, 2011 | 23.4 | 20.8 | | | | |
| GWM-12S | July 21, 2011 | 28.3 | 29.1 | | | | |
| GWM-12S | February 6, 2012 | 32.6 | 28.8 | | | | |
| GWM-12S | April 11, 2012 | 31.7 | 30.1 | | | | |
| GWM-12S | July 16, 2012 | 29.1 | 23.4 | | | | |
| GWM-12S | January 16, 2013 | 35.1 | 35.7 | | | | |
| GWM-12S | June 28, 2013 | 33.8 | 26.7 | | | | |
| GWM-12S | October 25, 2013 | 29.4 | 28.8 | | | | |
| GWM-12S | July 22, 2014 | NS | NS | | | | |
| GWM-12S | November 12, 2014 | 28.8 | 28.2 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|-------------------|-------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-13S | July 13, 2010 | ND | ND | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-13S | October 6, 2010 | 7.2 | ND | | | | |
| GWM-13S | January 19, 2011 | ND | ND | | | | |
| GWM-13S | April 7, 2011 | ND | ND | | | | |
| GWM-13S Dup | April 7, 2011 | ND | ND | | | | |
| GWM-13S | July 2011 | NS | NS | | | | |
| GWM-13S | October 4, 2011 | ND | ND | | | | |
| GWM-13S Dup | October 4, 2011 | ND | ND | | | | |
| GWM-13S | February 6, 2012 | 20.7 | ND | | | | |
| GWM-13S | April 9, 2012 | ND | ND | | | | |
| GWM-13S | July 12, 2012 | ND | ND | | | | |
| GWM-13S | January 9, 2013 | ND | ND | | | | |
| GWM-13S | July 3, 2013 | 5 J | ND | | | | |
| GWM-13S | October 29, 2013 | ND | ND | | | | |
| GWM-13S | July 22, 2014 | NS | NS | | | | |
| GWM-13S | November 12, 2014 | ND | ND | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|-------------------|-------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-13D | July 13, 2010 | 37.6 | 18.6 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-13D | October 6, 2010 | 41.4 | 36.1 | | | | |
| GWM-13D | January 19, 2011 | 44.6 | 43.5 | | | | |
| GWM-13D | April 7, 2011 | 47.2 | 46.6 | | | | |
| GWM-13D | July 2011 | NS | NS | | | | |
| GWM-13D | October 4, 2011 | 55.2 | 51.6 | | | | |
| GWM-13D | February 6, 2012 | 61.2 | 62.6 | | | | |
| GWM-13D | April 9, 2012 | 63.7 | 63.4 | | | | |
| GWM-13D | July 12, 2012 | 59.7 | 40.0 | | | | |
| GWM-13D | January 9, 2013 | 66.7 | 61.7 | | | | |
| GWM-13D | July 3, 2013 | 54.2 | 55.9 | | | | |
| GWM-13D | October 29, 2013 | 62.0 | 61.9 | | | | |
| GWM-13D | July 22, 2014 | 25.4 | 27.3 | | | | |
| GWM-13D | November 12, 2014 | 75.4 | 68.4 | | | | |
| | | | | | | | |
| GWM-14B | January 25, 2011 | 1,200 | 1,210 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-14B | April 8, 2011 | 1,060 | 1,040 | | | | |
| GWM-14B | July 22, 2011 | 345 | 327 | | | | |
| GWM-14B | October 5, 2011 | 499 | 480 | | | | |
| GWM-14B | February 2, 2012 | 1,660 | 1,690 | | | | |
| GWM-14B | April 11, 2012 | 1,700 | 1,670 | | | | |
| GWM-14B | July 19, 2012 | 1,710 | 1,530 | | | | |
| GWM-14B | January 11, 2013 | 1,270 | 1,760 | | | | |
| GWM-14B | July 3, 2013 | 589 | 649 | | | | |
| GWM-14B | October 23, 2013 | 1,660 | 1,580 | | | | |
| GWM-14B | July 23, 2014 | 701 | 644 | | | | |
| GWM-14B | November 13, 2014 | 884 | 588 | | | | |
| | | | | | | | |

Table 6
Current and Historical Analytical Results
(All Results µg/L)

| Well Identification | Date Measured | Arsenic Unfiltered µg/L | Arsenic Filtered µg/L | Penta Chlorophenol µg/L | 2,4 D µg/L | 2,4,5 T µg/L | 2,4,6 T µg/L |
|---------------------|-------------------|-------------------------|-----------------------|-------------------------|---------------|---------------|---------------|
| GWM-15B | January 24, 2011 | 44,200 | 45,700 | NA All Rounds | NA All Rounds | NA All Rounds | NA All Rounds |
| GWM-15B | April 11, 2011 | 39,300 | 38,700 | | | | |
| GWM-15B | July 22, 2011 | 44,400 | 42,900 | | | | |
| GWM-15B DUP | July 22, 2011 | 44,600 | 40,700 | | | | |
| GWM-15B | October 5, 2011 | 47,500 | 45,300 | | | | |
| GWM-15B | February 2, 2012 | 34,200 | 31,600 | | | | |
| GWM-15B | April 11, 2012 | 22,800 | 21,900 | | | | |
| GWM-15B | July 19, 2012 | 19,100 | 19,800 | | | | |
| GWM-15B DUP | July 19, 2012 | 18,800 | 18,100 | | | | |
| GWM-15B | January 11, 2013 | 12,800 | 13,600 | | | | |
| GWM-15B | July 2, 2013 | 16,400 | 16,700 | | | | |
| GWM-15B | October 25, 2013 | 9,810 | 9,430 | | | | |
| GWM-15B | July 23, 2014 | 12,000 | 9,200 | | | | |
| GWM-15B | November 12, 2014 | 9,960 | 11,000 | | | | |
| | | | | | | | |

NS: Not Sampled

NA: Not Analyzed

ND: Not Detected

J: Estimated below reporting limit

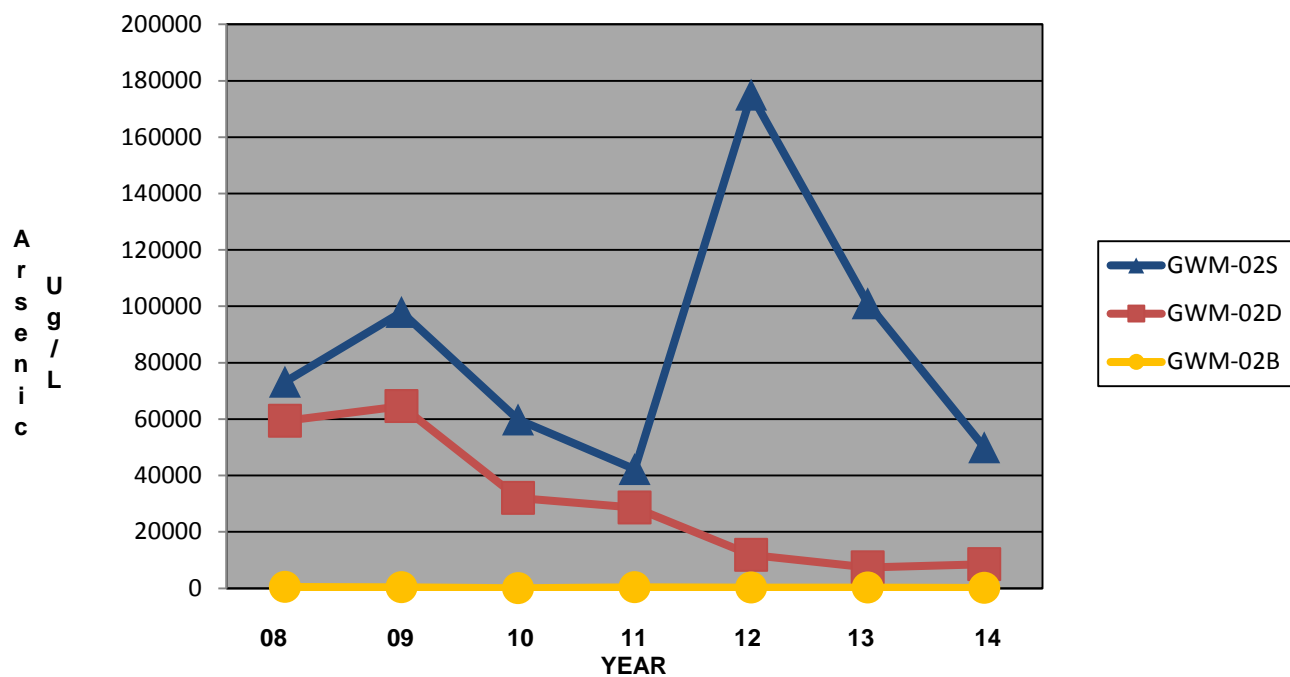
B: Also detected in lab blank

- 1) MDNR-B1 was a sample collected from the well now designated as B-11.
- 2) PC-1 was a grab sample collected in 1995. Though not near GWM-01, PC-1 is representative of up-gradient groundwater quality west of the site; GWM-01 is an up-gradient well placed to determine groundwater quality west of the site. Piezometer Piez.-09 was installed by Radian. The piezometer was located near GWM-01S. The piezometer has been abandoned.
- 3) Well MW-10 was installed by Teracon. The well was located near GWM-02. The well has been abandoned.
- 4) GW sample NS-2 was collected by the MDNR as part of the initial site investigation. The sample was collected from the vicinity of GWM-03S.
- 5) GW sample GP-6 was collected by the Radian as part of the initial site investigation. The sample was collected from the vicinity of GWM-03S and GWM-03D.
- 6) Piezometer Piez.-03 was installed by Radian. The piezometer was located near GWM-04S and GWM-04D. The piezometer has been abandoned.
- 7) Piezometer Piez.-05 was installed by Radian. The piezometer was located near GWM-05S and GWM-05D. The piezometer has been abandoned.
- 8) Piezometer Piez.-01 was installed by Radian. The piezometer was located near GWM-07S. The piezometer has been abandoned.

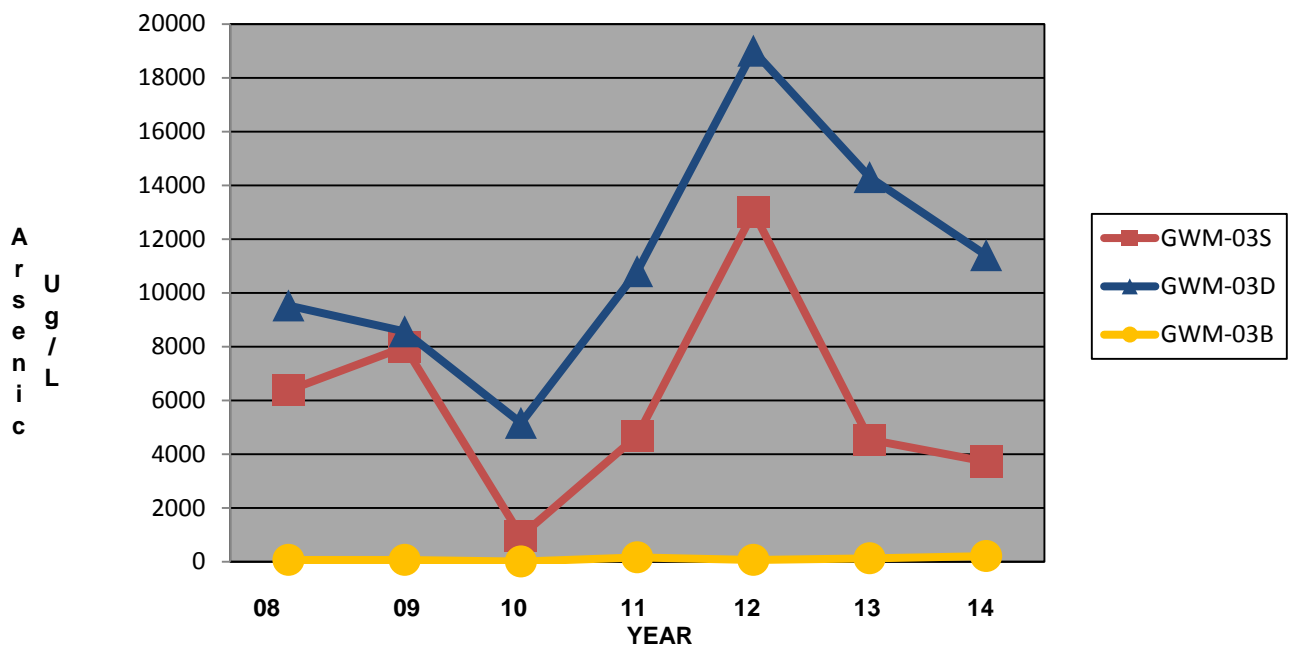
APPENDIX A

ARSENIC CONCENTRATION TREND GRAPHS

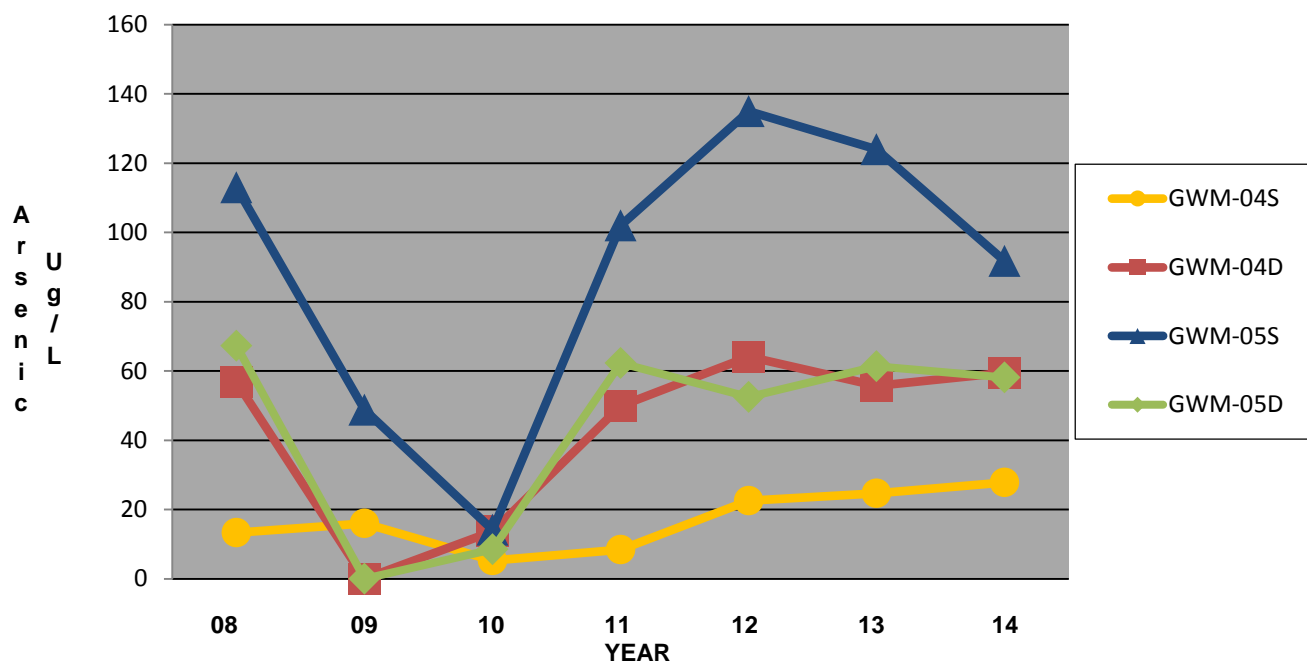
ON THE PROPERTY



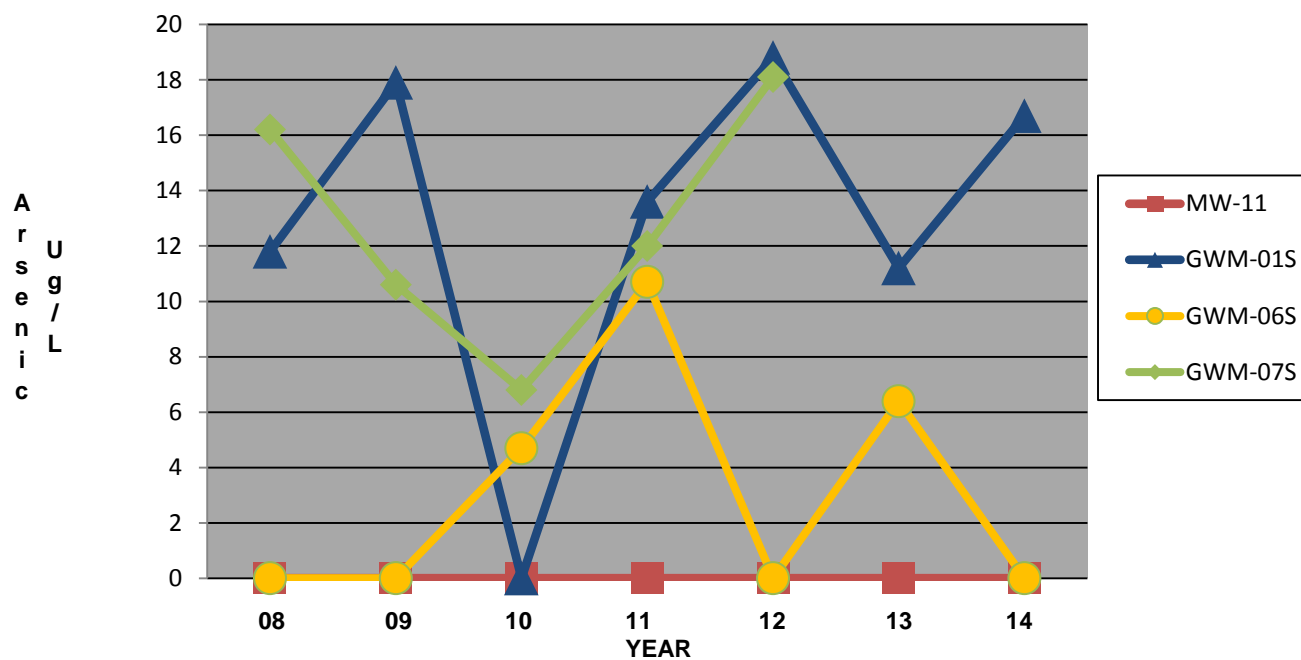
IMMEDIATELY DOWN GRADIENT



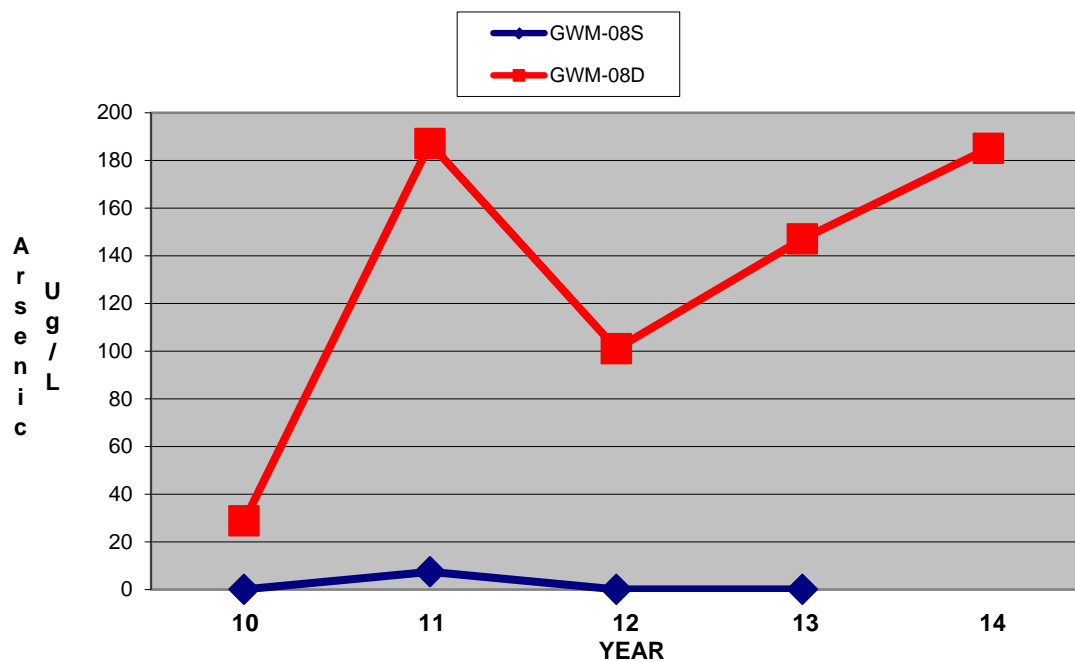
MID DOWN GRADIENT TREASURE CHEST AREA



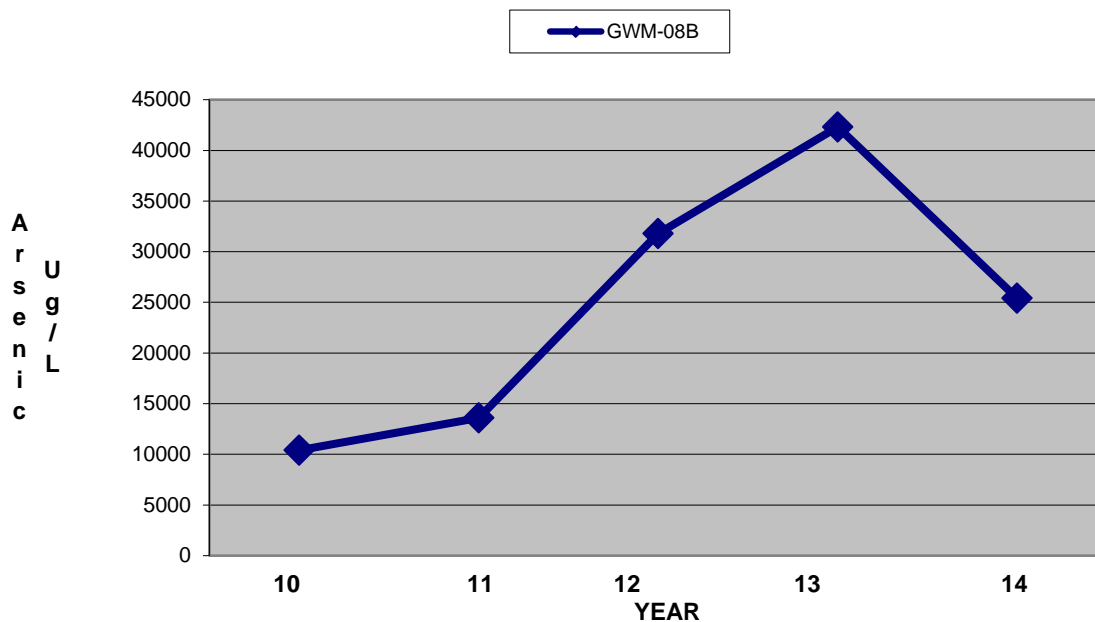
FAR DOWN GRADIENT and UP GRADIENT



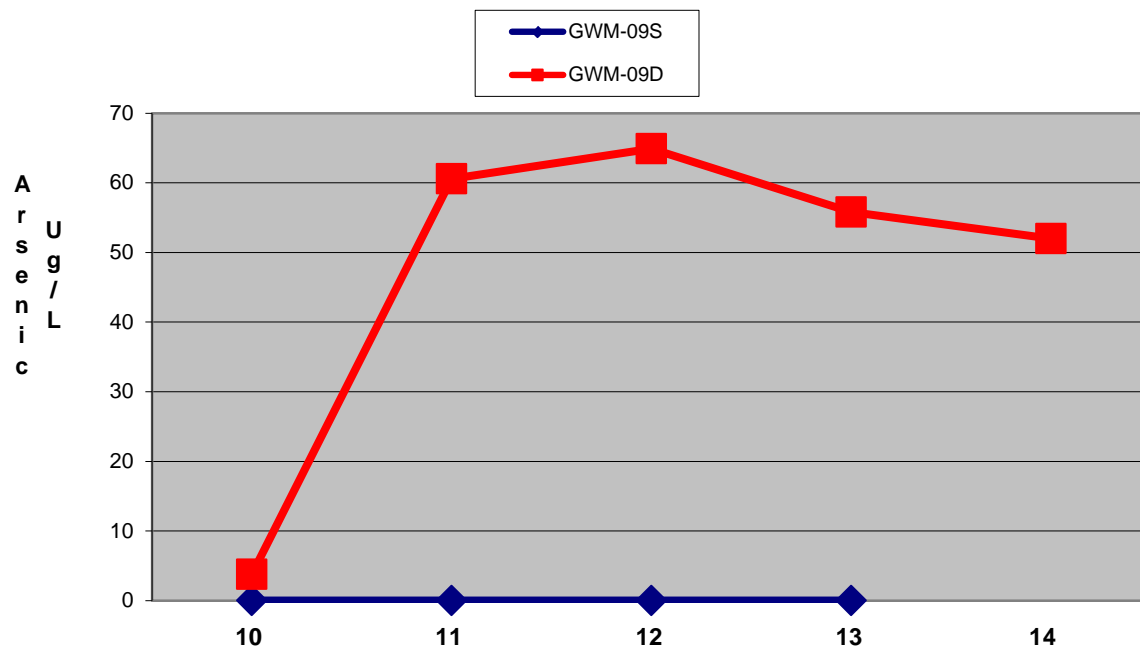
POST RA
GWM 08 Shallow and Deep Wells



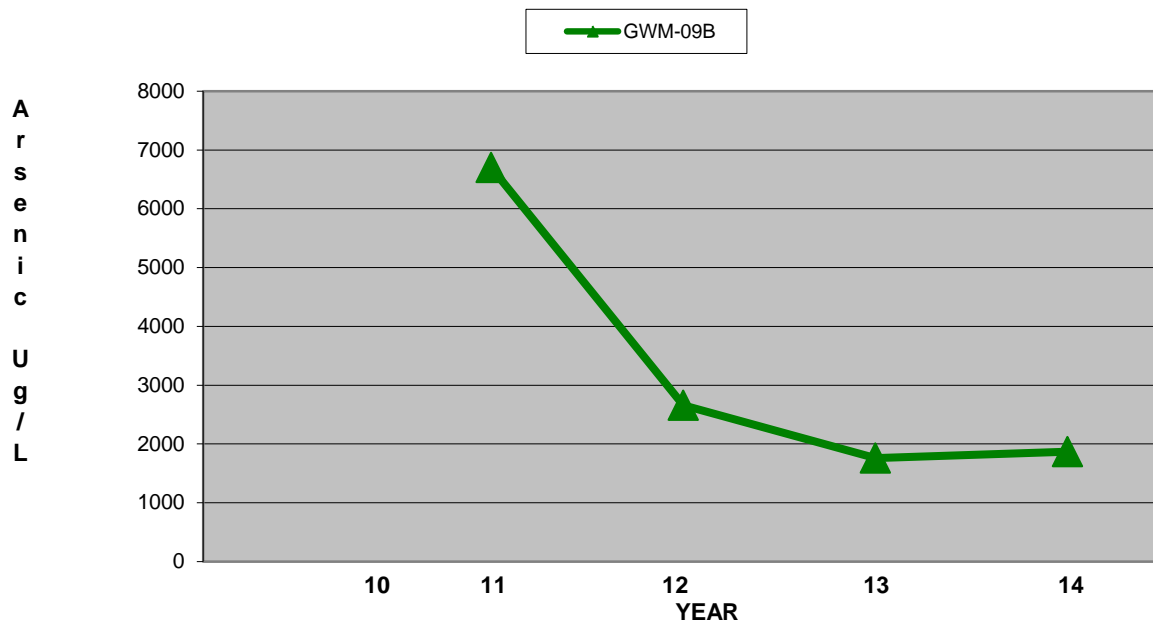
POST RA
GWM 08B Well

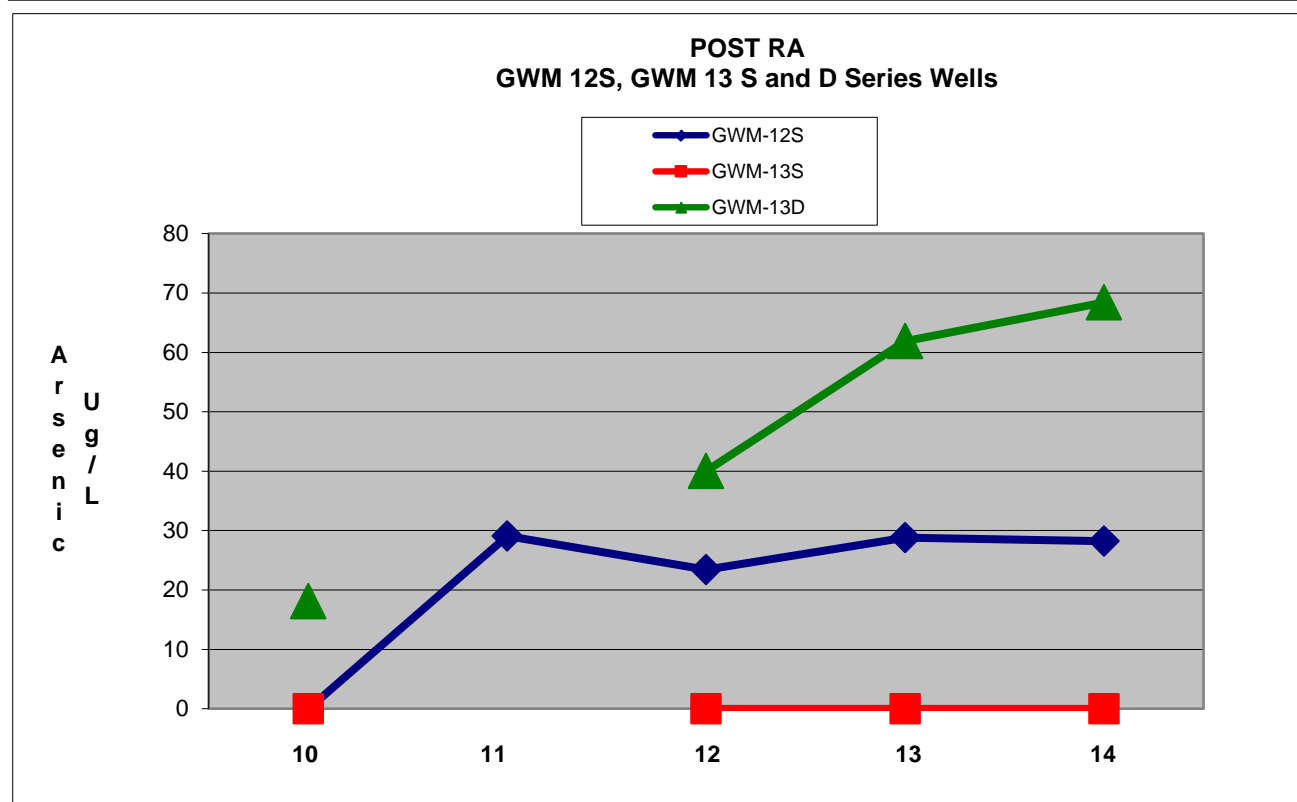
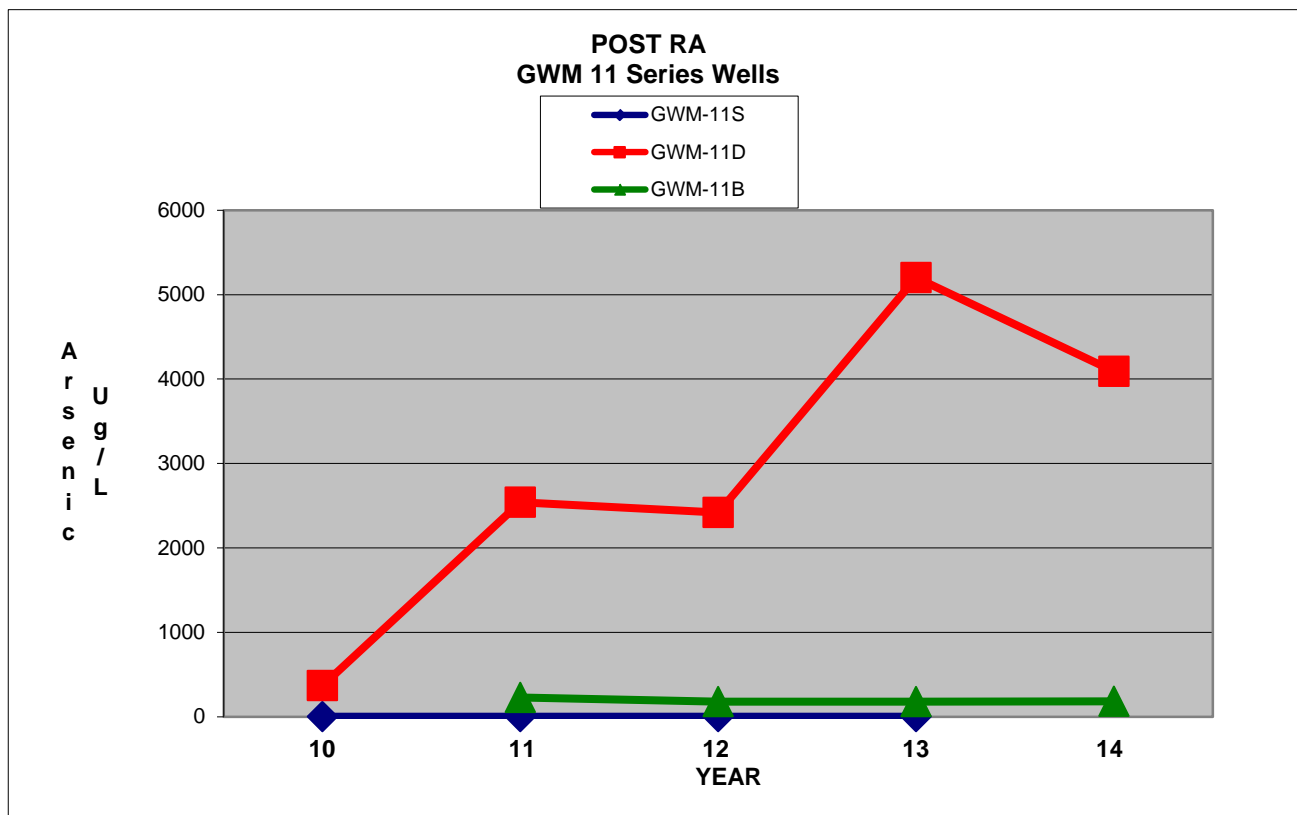


POST RA
GWM 09 S and D Series Wells

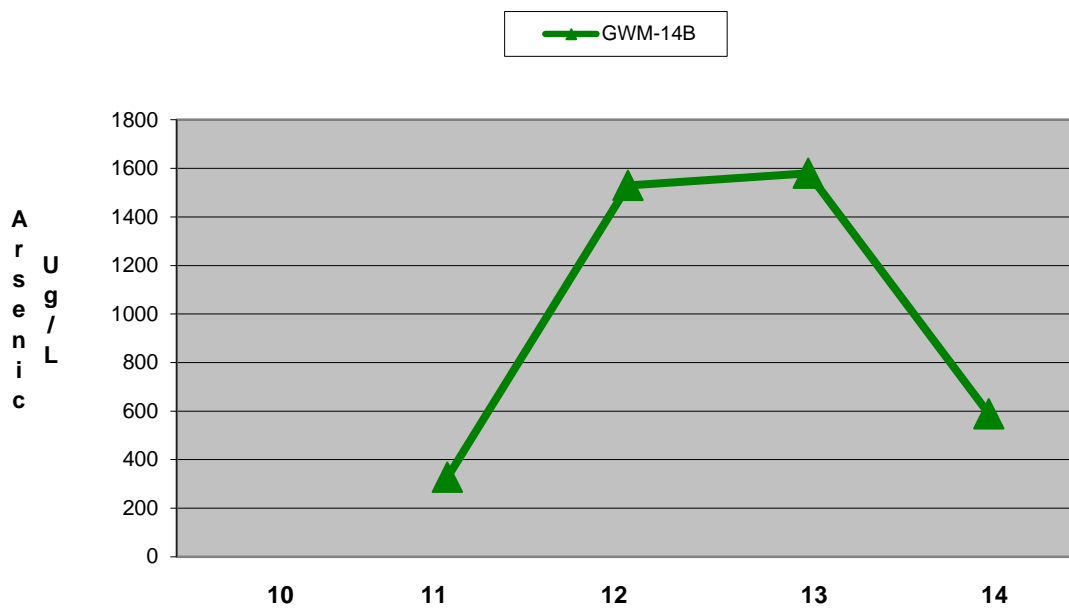


POST RA
GWM 09 B Well

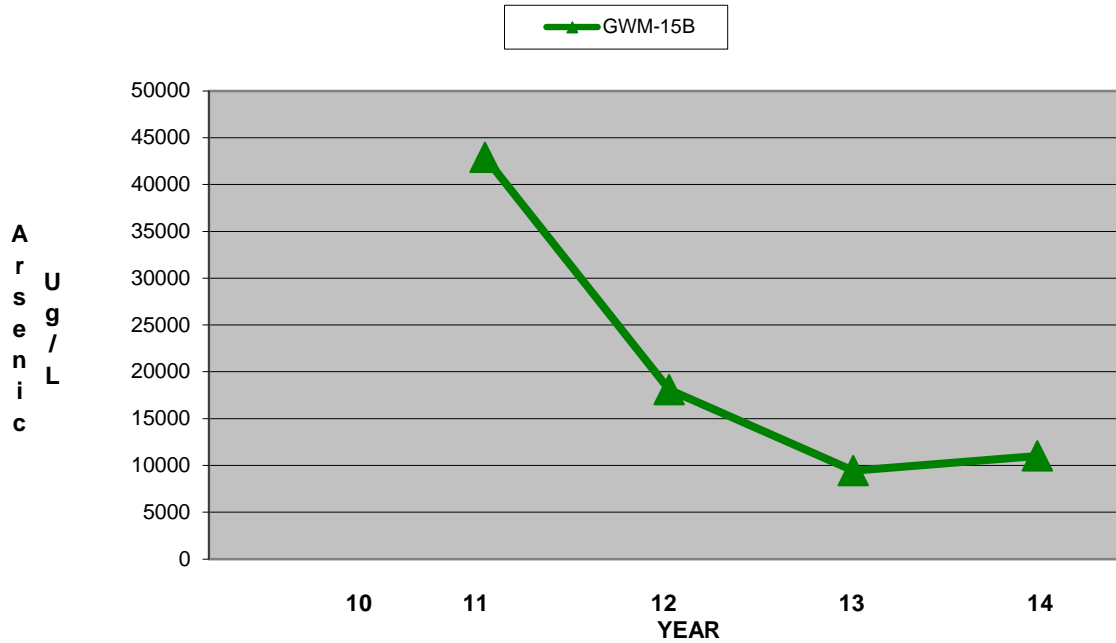




POST RA
GWM 14B well



POST RA
GWM 15 B Well

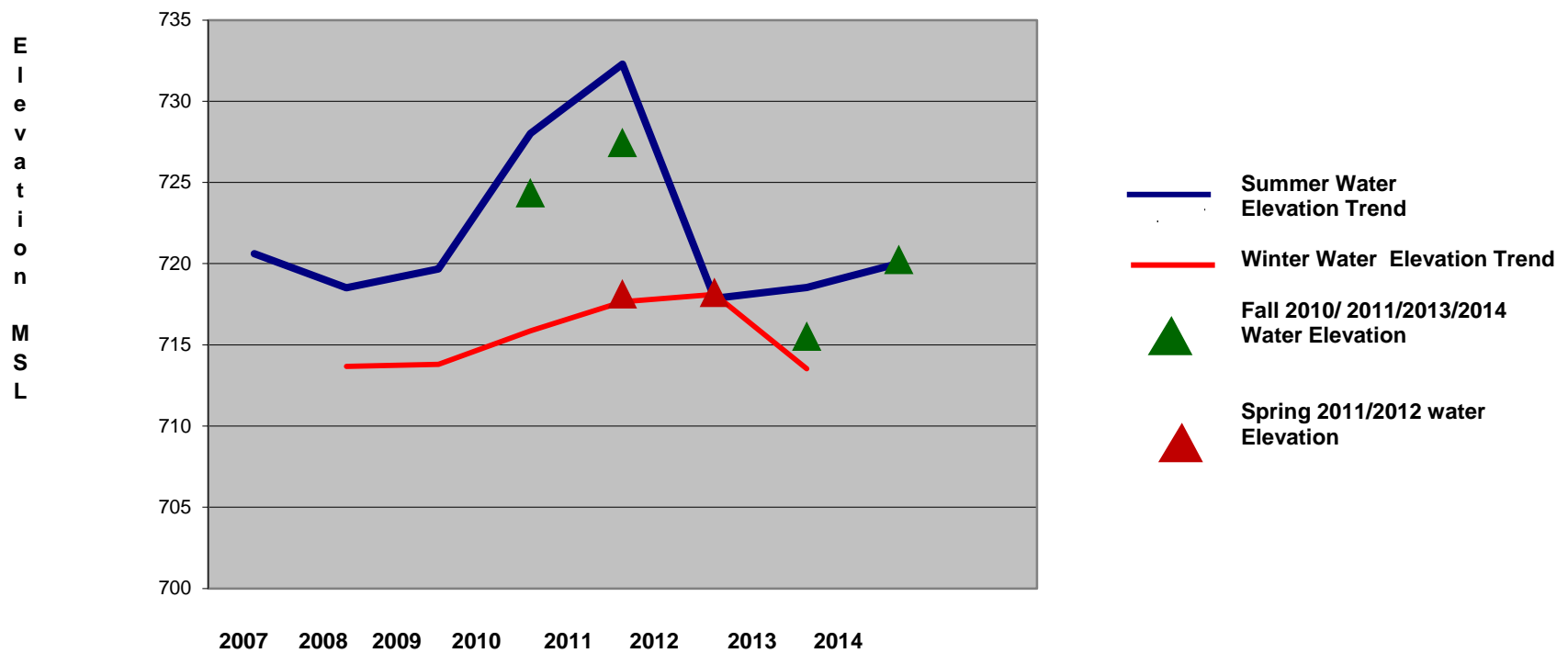


APPENDIX B

HISTORICAL WATER LEVELS AND GRAPHS

RIO TINTO
LEGACY MANAGEMENT

FIGURE 2
WATER ELEVATION TRENDS



Field Data Sheet
Water Level Measurements and Well Depth

Date: 11/11/14

Measured By: Manu Ajmani

Site: Armour Road Site

| Well Identification | Casing Elevation (MSL) | Depth to Groundwater | Total Depth | Comments |
|---------------------|------------------------|-------------------------|-------------|----------|
| GWM-01S | 739.82 | 19.00 | 27.99' | |
| GWM-02S | 739.81 | 19.46' | 32.55' | |
| GWM-02D | 739.94 | 19.49 | 52.80' | |
| GWM-02B | 739.65 | 19.29' | 99.49' | |
| GWM-03S | 742.13 | 19.21 21.12' | 32.09' | |
| GWM-03D | 742.01 | 21.64' | 52.04' | |
| GWM-03B | 742.10 | 21.73' | 98.20' | |
| GWM-04S | 733.82 | 13.78' | 30.92' | |
| GWM-04D | 733.88 | 13.72' | 51.1' | |
| GWM-05S | 735.60 | 15.49' | 28.20' | |
| GWM-05D | 735.85 | 15.73' | 50.37' | |
| GWM-06S | 737.80 | 18.74' | 29.21' | |
| GWM-08S | NA | 22.22' | 28.81' | |
| GWM-08D | 742.76 | 22.40' | 48.90' | |
| GWM-08B | 742.54 | 22.28' | 107.65' | |
| GWM-09S | 733.47 | 12.98 | 20.56' | |
| GWM-09D | 733.83 | 13.41 | 40.40' | |
| GWM-09B | 733.50 | 13.24 | 111.56' | |
| GWM-11S | 736.08 | 15.59' | 22.01' | |
| GWM-11D | 736.07 | 15.66' | 41.90' | |
| GWM-11B | 735.76 | 15.64' | 94.46' | |
| GWM-12S | 740.82 | 20.34' | 28.75' | |
| GWM-13S | 731.72 | 11.86' | 24.53' | |
| GWM-13D | 731.70 | 11.89' | 44.44' | |
| GWM-14B | 743.93 | 23.61' | 108.51' | |
| GWM-15B | 741.43 | 21.17' | 120.74' | |
| MW-11 | 740.51 | 19.96' | 37.07' | |

Appendix B
Historical Water Level Measurements and Elevations

| Well Identification | Casing Elevation (MSL) | 5-Jul-07 | | 24-Jan-08 | | 21-Sep-08 | | 16-Feb-09 | |
|---------------------|------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| | | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) |
| GWM-01S | 739.82 | 19.11 | 720.71 | 25.65 | 714.17 | 20.90 | 718.92 | 25.78 | 714.04 |
| GWM-02S | 739.81 | 18.95 | 720.86 | 25.58 | 714.23 | 21.02 | 718.79 | 25.86 | 713.95 |
| GWM-02D | 739.94 | 19.09 | 720.85 | 25.71 | 714.23 | 21.14 | 718.80 | 25.99 | 713.95 |
| GWM-02B | 739.65 | 18.77 | 720.88 | 25.71 | 713.94 | 20.81 | 718.84 | 25.70 | 713.95 |
| GWM-03S | 742.13 | 21.22 | 720.91 | 28.13 | 714.00 | 23.35 | 718.78 | 28.29 | 713.84 |
| GWM-03D | 742.01 | 21.08 | 720.93 | 28.03 | 713.98 | 23.21 | 718.80 | 28.13 | 713.88 |
| GWM-03B | 742.10 | 21.19 | 720.91 | 28.10 | 714.00 | 23.34 | 718.76 | 28.21 | 713.89 |
| GWM-04S | 733.82 | 13.41 | 720.41 | 20.45 | 713.37 | 15.58 | 718.24 | 20.33 | 713.49 |
| GWM-04D | 733.88 | 13.26 | 720.62 | 20.48 | 713.40 | 15.35 | 718.53 | 20.26 | 713.62 |
| GWM-05S | 735.60 | 14.99 | 720.61 | 22.38 | 713.22 | 17.42 | 718.18 | 22.10 | 713.50 |
| GWM-05D | 735.85 | 15.22 | 720.63 | 22.15 | 713.70 | 17.68 | 718.17 | 22.32 | 713.53 |
| GWM-06S | 737.80 | 17.87 | 719.93 | 24.91 | 712.89 | 20.10 | 717.70 | 24.25 | 713.55 |
| GWM-07S | 737.65 | 18.37 | 719.28 | 25.15 | 712.50 | 20.10 | 717.55 | 23.80 | 713.85 |
| GWM-08S | 740.91 | | | | | | | | |
| GWM-08D | 740.81 | | | | | | | | |
| GWM-08B | 740.80 | | | | | | | | |
| GWM-09S | 733.47 | | | | | | | | |
| GWM-09D | 733.83 | | | | | | | | |
| GWM-09B | | | | | | | | | |
| GWM-10S | 735.36 | | | | | | | | |
| GWM-10D | 735.45 | | | | | | | | |
| GWM-10DD' | | | | | | | | | |
| GWM-10B | 735.32 | | | | | | | | |
| GWM-11S | 736.08 | | | | | | | | |
| GWM-11D | 736.07 | | | | | | | | |
| GWM-11B | | | | | | | | | |
| GWM-12S | 740.82 | | | | | | | | |
| GWM-13S | 731.72 | | | | | | | | |
| GWM-13D | 731.70 | | | | | | | | |
| GWM-14B | | | | | | | | | |
| GWM-15B | | | | | | | | | |
| MW-11 | 740.51 | 19.54 | 720.97 | 26.11 | 714.40 | 21.39 | 719.12 | 26.06 | 714.45 |

| | | | | | | | | | |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| AVERAGE WATER ELEVATION SUMMER | | | 720.61 | | | | 718.51 | | |
| AVERAGE WATER ELEVATION WINTER | | | | | 713.68 | | | | 713.80 |
| AVERAGE WATER ELEVATION FALL | | | | | | | | | |
| Summer Elevations | 720.61 | 718.51 | 719.68 | 728.01 | 732.28 | 717.86 | 718.53 | 720.01 | |
| Winter Elevations | | 713.68 | 713.80 | 715.86 | 717.66 | 718.10 | 713.52 | | |
| Fall Elevations | | | | 724.37 | 727.45 | | 715.52 | 720.26 | |
| Spring Elevations | | | | | 718.13 | 718.22 | | | |

Appendix B
Historical Water Level Measurements and Elevations

| Well Identification | Casing Elevation (MSL) | 28-Jul-09 | | 2-Feb-10 | | 12-Jul-10 | | 4-Oct-10 | |
|---------------------|------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| | | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) |
| GWM-01S | 739.82 | 20.04 | 719.78 | 23.58 | 716.24 | 12.00 | 727.82 | 15.20 | 724.62 |
| GWM-02S | 739.81 | 19.94 | 719.87 | 23.93 | 715.88 | 11.82 | 727.99 | 15.20 | 724.61 |
| GWM-02D | 739.94 | 20.19 | 719.75 | 24.08 | 715.86 | 12.11 | 727.83 | 15.36 | 724.58 |
| GWM-02B | 739.65 | 19.8 | 719.85 | 23.75 | 715.90 | 11.81 | 727.84 | 15.02 | 724.63 |
| GWM-03S | 742.13 | 22.23 | 719.90 | 26.29 | 715.84 | 14.21 | 727.92 | 17.56 | 724.57 |
| GWM-03D | 742.01 | 22.15 | 719.86 | 26.14 | 715.87 | 14.12 | 727.89 | 17.42 | 724.59 |
| GWM-03B | 742.10 | 22.24 | 719.86 | 26.21 | 715.89 | 14.18 | 727.92 | 17.57 | 724.53 |
| GWM-04S | 733.82 | 14.35 | 719.47 | 18.06 | 715.76 | 5.74 | 728.08 | 9.72 | 724.10 |
| GWM-04D | 733.88 | 14.3 | 719.58 | 17.99 | 715.89 | 5.69 | 728.19 | 9.66 | 724.22 |
| GWM-05S | 735.60 | 16.01 | 719.59 | 19.84 | 715.76 | 7.45 | 728.15 | 11.43 | 724.17 |
| GWM-05D | 735.85 | 16.26 | 719.59 | 20.10 | 715.75 | 7.67 | 728.18 | 11.74 | 724.11 |
| GWM-06S | 737.80 | 18.65 | 719.15 | 21.97 | 715.83 | 9.60 | 728.20 | 14.02 | 723.78 |
| GWM-07S | 737.65 | 18.46 | 719.19 | 21.78 | 715.87 | 9.40 | 728.25 | 13.97 | 723.68 |
| GWM-08S | 740.91 | | | | | 12.93 | 727.98 | 16.59 | 724.32 |
| GWM-08D | 740.81 | | | | | 12.82 | 727.99 | 16.49 | 724.32 |
| GWM-08B | 740.80 | | | | | 12.76 | 728.04 | 16.44 | 724.36 |
| GWM-09S | 733.47 | | | | | 5.35 | 728.12 | 9.82 | 723.65 |
| GWM-09D | 733.83 | | | | | 5.78 | 728.05 | 9.25 | 724.58 |
| GWM-09B | | | | | | | | | |
| GWM-10S | 735.36 | | | | | 7.30 | 728.06 | 10.78 | 724.58 |
| GWM-10D | 735.45 | | | | | 7.38 | 728.07 | 10.86 | 724.59 |
| GWM-10DD' | | | | | | | | | |
| GWM-10B | 735.32 | | | | | 7.26 | 728.06 | 10.74 | 724.58 |
| GWM-11S | 736.08 | | | | | 8.00 | 728.08 | 11.49 | 724.59 |
| GWM-11D | 736.07 | | | | | 8.11 | 727.96 | 11.43 | 724.64 |
| GWM-11B | | | | | | | | | |
| GWM-12S | 740.82 | | | | | 13.15 | 727.67 | 16.06 | 724.76 |
| GWM-13S | 731.72 | | | | | 3.66 | 728.06 | 7.73 | 723.99 |
| GWM-13D | 731.70 | | | | | 3.60 | 728.10 | 7.79 | 723.91 |
| GWM-14B | | | | | | | | | |
| GWM-15B | | | | | | | | | |
| MW-11 | 740.51 | 20.45 | 720.06 | 24.43 | 716.08 | 12.72 | 727.79 | 15.65 | 724.86 |

AVERAGE WATER ELEVATION SUMMER

719.68

AVERAGE WATER ELEVATION WINTER

715.86

AVERAGE WATER ELEVATION FALL

724.37

AVERAGE WATER ELEVATION SPRING

Appendix B
Historical Water Level Measurements and Elevations

| | | 24-Jan-11 | | 4-Apr-11 | | 18-Jul-11 | | 3-Oct-11 | |
|----------------------------|-------------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|
| Well Identification | Casing Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) |
| GWM-01S | 739.82 | 20.94 | 718.88 | 20.50 | 719.32 | 7.99 | 731.83 | 11.95 | 727.87 |
| GWM-02S | 739.81 | 21.85 | 717.96 | 21.78 | 718.03 | 7.88 | 731.93 | 12.00 | 727.81 |
| GWM-02D | 739.94 | 21.70 | 718.24 | 21.93 | 718.01 | 8.00 | 731.94 | 12.11 | 727.83 |
| GWM-02B | 739.65 | 21.42 | 718.23 | 21.58 | 718.07 | 7.65 | 732.00 | 11.86 | 727.79 |
| GWM-03S | 742.13 | 23.90 | 718.23 | 25.84 | 716.29 | 10.00 | 732.13 | 14.40 | 727.73 |
| GWM-03D | 742.01 | 23.88 | 718.13 | 23.98 | 718.03 | 9.90 | 732.11 | 14.31 | 727.70 |
| GWM-03B | 742.10 | 23.97 | 718.13 | 24.08 | 718.02 | 9.95 | 732.15 | 14.40 | 727.70 |
| GWM-04S | 733.82 | 17.05 | 716.77 | 15.63 | 718.19 | 1.38 | 732.44 | 6.77 | 727.05 |
| GWM-04D | 733.88 | 16.97 | 716.91 | 15.57 | 718.31 | 1.31 | 732.57 | 6.75 | 727.13 |
| GWM-05S | 735.60 | 18.64 | 716.96 | 17.42 | 718.18 | 2.85 | 732.75 | 8.51 | 727.09 |
| GWM-05D | 735.85 | 18.93 | 716.92 | 17.64 | 718.21 | 3.09 | 732.76 | 8.80 | 727.05 |
| GWM-06S | 737.80 | 21.95 | 715.85 | 19.28 | 718.52 | 4.58 | 733.22 | 11.30 | 726.50 |
| GWM-07S | 737.65 | 22.38 | 715.27 | 18.75 | 718.90 | 4.18 | 733.47 | 11.48 | 726.17 |
| GWM-08S | 740.91 | 23.33 | 717.58 | 22.85 | 718.06 | 8.52 | 732.39 | 13.43 | 727.48 |
| GWM-08D | 740.81 | 23.35 | 717.46 | 22.74 | 718.07 | 8.42 | 732.39 | 13.35 | 727.46 |
| GWM-08B | 740.80 | 23.25 | 717.55 | 22.69 | 718.11 | 8.37 | 732.43 | 13.39 | 727.41 |
| GWM-09S | 733.47 | 15.36 | 718.11 | 15.27 | 718.20 | 1.12 | 732.35 | 5.68 | 727.79 |
| GWM-09D | 733.83 | 15.81 | 718.02 | 15.68 | 718.15 | 1.58 | 732.25 | 6.13 | 727.70 |
| GWM-09B | 733.50 | 15.65 | 717.85 | 15.54 | 717.96 | 1.45 | 732.05 | 6.00 | 727.50 |
| GWM-10S | 735.36 | 17.30 | 718.06 | 17.23 | 718.13 | 3.03 | 732.33 | 7.62 | 727.74 |
| GWM-10D | 735.45 | 17.37 | 718.08 | 17.29 | 718.16 | 3.11 | 732.34 | 7.71 | 727.74 |
| GWM-10DD' | 735.27 | 17.83 | 717.44 | 17.24 | 718.03 | 3.09 | 732.18 | 7.65 | 727.62 |
| GWM-10B | 735.32 | 17.28 | 718.04 | 17.19 | 718.13 | 3.04 | 732.28 | 7.62 | 727.70 |
| GWM-11S | 736.08 | 18.01 | 718.07 | 17.94 | 718.14 | 3.74 | 732.34 | 8.38 | 727.70 |
| GWM-11D | 736.07 | 18.05 | 718.02 | 18.05 | 718.02 | 3.73 | 732.34 | 8.40 | 727.67 |
| GWM-11B | 735.76 | 15.49 | 720.27 | 17.75 | 718.01 | 3.56 | 732.20 | 8.16 | 727.60 |
| GWM-12S | 740.82 | 22.13 | 718.69 | 22.68 | 718.14 | 8.99 | 731.83 | 13.35 | 727.47 |
| GWM-13S | 731.72 | 15.49 | 716.23 | 13.56 | 718.16 | 0.00 | 731.72 | 4.95 | 726.77 |
| GWM-13D | 731.70 | 15.22 | 716.48 | 13.50 | 718.20 | 0.00 | 731.70 | 4.94 | 726.76 |
| GWM-14B | 743.93 | 26.33 | 717.60 | 25.84 | 718.09 | 11.46 | 732.47 | 16.48 | 727.45 |
| GWM-15B | 738.83 | 21.32 | 717.51 | 20.71 | 718.12 | 6.46 | 732.37 | 11.52 | 727.31 |
| MW-11 | 740.51 | 22.83 | 717.68 | 22.36 | 718.15 | 8.65 | 731.86 | 12.41 | 728.10 |

AVERAGE WATER ELEVATION SUMMER

732.28

AVERAGE WATER ELEVATION WINTER

717.66

AVERAGE WATER ELEVATION FALL

727.45

AVERAGE WATER ELEVATION SPRING

718.13

Appendix B

Historical Water Level Measurements and Elevations

| Well Identification | Casing Elevation (MSL) | 30-Jan-12 | | 5-Apr-12 | | 11-Jul-12 | |
|---------------------|------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| | | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) |
| GWM-01S | 739.82 | 21.02 | 718.80 | 20.97 | 718.85 | 21.60 | 718.22 |
| GWM-02S | 739.81 | 21.17 | 718.64 | 21.50 | 718.31 | 21.65 | 718.16 |
| GWM-02D | 739.94 | 21.30 | 718.64 | 21.67 | 718.27 | 21.76 | 718.18 |
| GWM-02B | 739.65 | 21.02 | 718.63 | 21.32 | 718.33 | 21.54 | 718.11 |
| GWM-03S | 742.13 | 23.55 | 718.58 | 23.87 | 718.26 | 23.98 | 718.15 |
| GWM-03D | 742.01 | 23.50 | 718.51 | 23.75 | 718.26 | 23.88 | 718.13 |
| GWM-03B | 742.10 | 23.56 | 718.54 | 23.81 | 718.29 | 23.99 | 718.11 |
| GWM-04S | 733.82 | 16.37 | 717.45 | 15.79 | 718.03 | 16.30 | 717.52 |
| GWM-04D | 733.88 | 16.32 | 717.56 | 15.74 | 718.14 | 16.26 | 717.62 |
| GWM-05S | 735.60 | 18.14 | 717.46 | 17.56 | 718.04 | 18.01 | 717.59 |
| GWM-05D | 735.85 | 18.40 | 717.45 | 17.80 | 718.05 | 18.31 | 717.54 |
| GWM-06S | 737.80 | 21.34 | 716.46 | 19.89 | 717.91 | 20.83 | 716.97 |
| GWM-07S | 737.65 | 21.66 | 715.99 | 19.75 | 717.90 | 21.03 | 716.62 |
| GWM-08S | 740.91 | 22.88 | 718.03 | 22.80 | 718.11 | 23.07 | 717.84 |
| GWM-08D | 740.81 | 22.78 | 718.03 | 22.69 | 718.12 | 22.94 | 717.87 |
| GWM-08B | 740.80 | 22.77 | 718.03 | 22.63 | 718.17 | 22.94 | 717.86 |
| GWM-09S | 733.47 | 14.90 | 718.57 | 15.03 | 718.44 | 15.29 | 718.18 |
| GWM-09D | 733.83 | 15.33 | 718.50 | 15.48 | 718.35 | 15.70 | 718.13 |
| GWM-09B | 733.50 | 15.23 | 718.27 | 15.35 | 718.15 | 15.53 | 717.97 |
| GWM-10S | 735.36 | 16.84 | 718.52 | 17.03 | 718.33 | NM | NA |
| GWM-10D | 735.45 | 16.94 | 718.51 | 17.11 | 718.34 | NM | NA |
| GWM-10DD' | 735.27 | 16.90 | 718.37 | 17.06 | 718.21 | NM | NA |
| GWM-10B | 735.32 | 16.87 | 718.45 | 17.00 | 718.32 | NM | NA |
| GWM-11S | 736.08 | 17.59 | 718.49 | 17.76 | 718.32 | 17.90 | 718.18 |
| GWM-11D | 736.07 | 17.60 | 718.47 | 17.80 | 718.27 | 17.96 | 718.11 |
| GWM-11B | 735.76 | 17.40 | 718.36 | 17.57 | 718.19 | 17.72 | 718.04 |
| GWM-12S | 740.82 | 22.24 | 718.58 | 22.38 | 718.44 | 22.46 | 718.36 |
| GWM-13S | 731.72 | 14.65 | 717.07 | 13.84 | 717.88 | 14.49 | 717.23 |
| GWM-13D | 731.70 | 14.69 | 717.01 | 13.84 | 717.86 | 14.48 | 717.22 |
| GWM-14B | 743.93 | 25.87 | 718.06 | 25.78 | 718.15 | 26.03 | 717.90 |
| GWM-15B | 738.83 | 20.67 | 718.16 | 20.66 | 718.17 | 20.88 | 717.95 |
| MW-11 | 740.51 | 21.47 | 719.04 | 21.97 | 718.54 | 22.10 | 718.41 |

AVERAGE WATER ELEVATION SUMMER 717.86

AVERAGE WATER ELEVATION WINTER 718.10

AVERAGE WATER ELEVATION FALL

AVERAGE WATER ELEVATION SPRING 718.22

Appendix B

Historical Water Level Measurements and Elevations

| | Elevation modified January 2013 | 7-Jan-13 | | 6/26/2013 (Date varies, see Table 2) | | 21-Oct-13 | | 21-Jul-14 | | 11-Nov-14 | |
|------------------------|---------------------------------------|-------------------------|-----------------------------|---|-----------------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|
| Well Identification | Casing Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) | Depth to Groundwater | Water Elevation (MSL) |
| GWM-01S | 739.82 | 25.35 | 714.47 | 21.03 | 718.79 | 24.16 | 715.66 | 19.70 | 720.12 | 19.00 | 720.82 |
| GWM-02S | 739.81 | 25.70 | 714.11 | 21.45 | 718.36 | 24.15 | 715.66 | 19.94 | 719.87 | 19.46 | 720.35 |
| GWM-02D | 739.94 | 25.85 | 714.09 | 21.62 | 718.32 | 24.31 | 715.63 | 20.00 | 719.94 | 19.49 | 720.45 |
| GWM-02B | 739.65 | 25.58 | 714.07 | 21.32 | 718.33 | 24.00 | 715.65 | 19.79 | 719.86 | 19.29 | 720.36 |
| GWM-03S | 742.13 | 28.07 | 714.06 | 23.86 | 718.27 | 26.48 | 715.65 | 22.19 | 719.94 | 21.72 | 720.41 |
| GWM-03D | 742.01 | 28.04 | 713.97 | 23.66 | 718.35 | 26.42 | 715.59 | 22.10 | 719.91 | 21.64 | 720.37 |
| GWM-03B | 742.10 | 28.11 | 713.99 | 23.88 | 718.22 | 26.48 | 715.62 | 22.13 | 719.97 | 21.73 | 720.37 |
| GWM-04S | 733.82 | 20.92 | 712.90 | 15.13 | 718.69 | 18.51 | 715.31 | 13.85 | 719.97 | 13.78 | 720.04 |
| GWM-04D | 733.88 | 20.88 | 713.00 | 15.13 | 718.75 | 18.46 | 715.42 | 13.83 | 720.05 | 13.72 | 720.16 |
| GWM-05S | 735.60 | 22.66 | 712.94 | 16.78 | 718.82 | 20.25 | 715.35 | 15.47 | 720.13 | 15.49 | 720.11 |
| GWM-05D | 735.85 | 22.96 | 712.89 | 17.09 | 718.76 | 20.51 | 715.34 | 15.74 | 720.11 | 15.73 | 720.12 |
| GWM-06S | 737.80 | 25.80 | 712.00 | 18.95 | 718.85 | 22.64 | 715.16 | 17.85 | 719.95 | 18.74 | 719.06 |
| GWM-07S | 737.65 | 26.05 | 711.60 | 18.97 | 718.68 | NM | NA | Abandoned | NA | Abandoned | NA |
| GWM-08S | 742.51 | 28.46 | NA | 23.98 | 718.53 | 27.08 | 715.43 | NM | NA | 22.22 | 720.29 |
| GWM-08D | 742.76 | 29.31 | 713.45 | 24.08 | 718.68 | 27.23 | 715.53 | 22.75 | 720.01 | 22.40 | 720.36 |
| GWM-08B | 742.54 | 29.19 | 713.35 | 24.29 | 718.25 | 27.05 | 715.49 | 22.65 | 719.89 | 22.28 | 720.26 |
| GWM-09S | 733.47 | 19.50 | 713.97 | 14.82 | 718.65 | 17.75 | 715.72 | 13.40 | 720.07 | 12.98 | 720.49 |
| GWM-09D | 733.83 | 19.96 | 713.87 | 15.26 | 718.57 | 18.19 | 715.64 | 13.83 | 720.00 | 13.41 | 720.42 |
| GWM-09B | 733.50 | 19.85 | 713.65 | 15.20 | 718.30 | 18.09 | 715.41 | 13.70 | 719.80 | 13.20 | 720.30 |
| GWM-10S | 735.36 | NM | NA | NM | NA | NM | NA | Abandoned | NA | Abandoned | NA |
| GWM-10D | 735.45 | NM | NA | NM | NA | NM | NA | Abandoned | NA | Abandoned | NA |
| GWM-10DD' | 735.27 | NM | NA | NM | NA | NM | NA | Abandoned | NA | Abandoned | NA |
| GWM-10B | 735.32 | NM | NA | NM | NA | NM | NA | Abandoned | NA | Abandoned | NA |
| GWM-11S | 736.08 | 21.91 | 714.17 | 17.44 | 718.64 | 20.44 | 715.64 | 15.99 | 720.09 | 15.59 | 720.49 |
| GWM-11D | 736.07 | 22.11 | 713.96 | 17.52 | 718.55 | 20.46 | 715.61 | 16.01 | 720.06 | 15.66 | 720.41 |
| GWM-11B | 735.76 | 22.00 | 713.76 | 17.34 | 718.42 | 20.19 | 715.57 | 15.80 | 719.96 | 15.64 | 720.12 |
| GWM-12S | 740.82 | 26.45 | 714.37 | 22.60 | 718.22 | 25.02 | 715.80 | 21.14 | 719.68 | 20.34 | 720.48 |
| GWM-13S | 731.72 | 19.20 | 712.52 | 13.04 | 718.68 | 16.53 | 715.19 | 11.75 | 719.97 | 11.86 | 719.86 |
| GWM-13D | 731.70 | 19.19 | 712.51 | 13.01 | 718.69 | 16.54 | 715.16 | 11.70 | 720.00 | 11.89 | 719.81 |
| GWM-14B | 743.93 | 30.36 | 713.57 | 25.31 | 718.62 | 28.44 | 715.49 | 22.76 | 721.17 | 23.61 | 720.32 |
| GWM-15B | 741.43 | 28.06 | 713.37 | 22.85 | 718.58 | 25.95 | 715.48 | 21.50 | 719.93 | 21.17 | 720.26 |
| MW-11 | 740.51 | 26.00 | 714.51 | 22.25 | 718.26 | 24.64 | 715.87 | 20.75 | 719.76 | 19.96 | 720.55 |

718.53

720.01

713.52

715.52

720.26

APPENDIX C

GROUNDWATER SAMPLE COLLECTION FIELD DATA SHEETS

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-18

Project Number: MH001026.0002

HydraSleeve Size: 1-line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 1420

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 27.99'

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

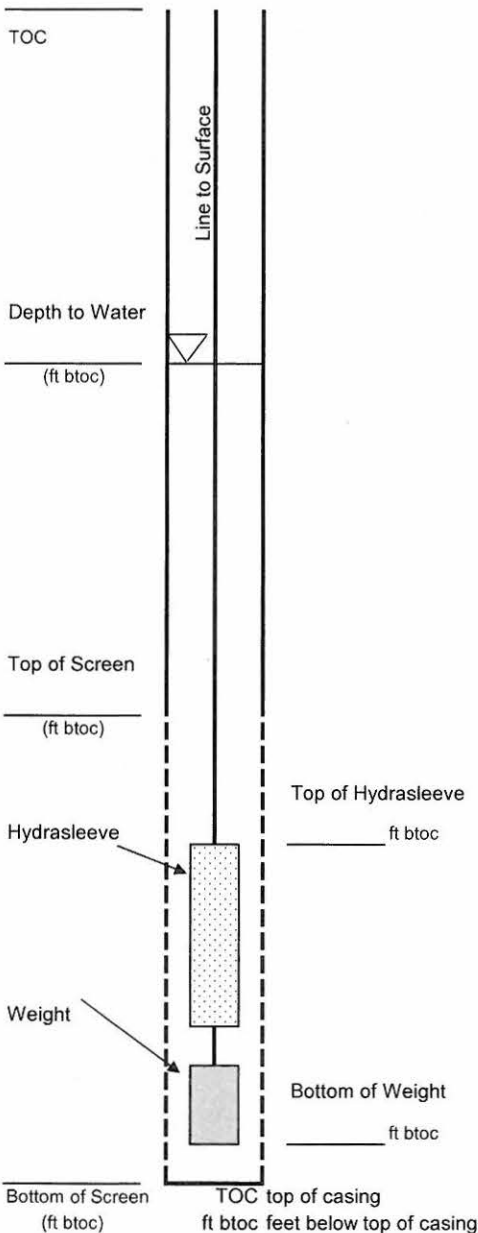
1" = 0.04
1.25" = 0.06

1.5" = 0.09
2" = 0.16

2.5" = 0.26
3" = 0.37

3.5" = 0.50
4" = 0.65

6" = 1.47



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 11-12-14

Time Removed: 1545

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | | | |
|--|--|-------------------------------|---------------------|
| Sample ID: <u>GWM-18 (20141112)</u> | | Sample Time: <u>1545</u> | |
| COC: Total Arsenic (6010C) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: <u>FB-01 (20141112)</u> | | Sample Time: <u>1545</u> | |
| Sample ID: <u>GWM-18 (20141112)</u> | | Sample Time: <u>1545</u> | |
| COC: Dissolved Arsenic (6010C) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: <u>FB-01 (20141112)</u> | | Sample Time: <u>1545</u> | |
| Sample ID: | | Sample Time: | |
| COC: Total Arsenic (7062) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: | | Sample Time: | |
| Sample ID: | | Sample Time: | |
| COC: Dissolved Arsenic (7062) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: | | Sample Time: | |
| Sample Notes: _____ | | | |
| _____ | | | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

* Bolts on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-25

Project Number: MH001026.0002

HydraSleeve Size: 1-Litre

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11/11/14

Weather: Cold

Time Installed: 0900

Casing Material: PVC Sch 40

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 32.55

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

1" = 0.04

1.5" = 0.09

2.5" = 0.26

3.5" = 0.50

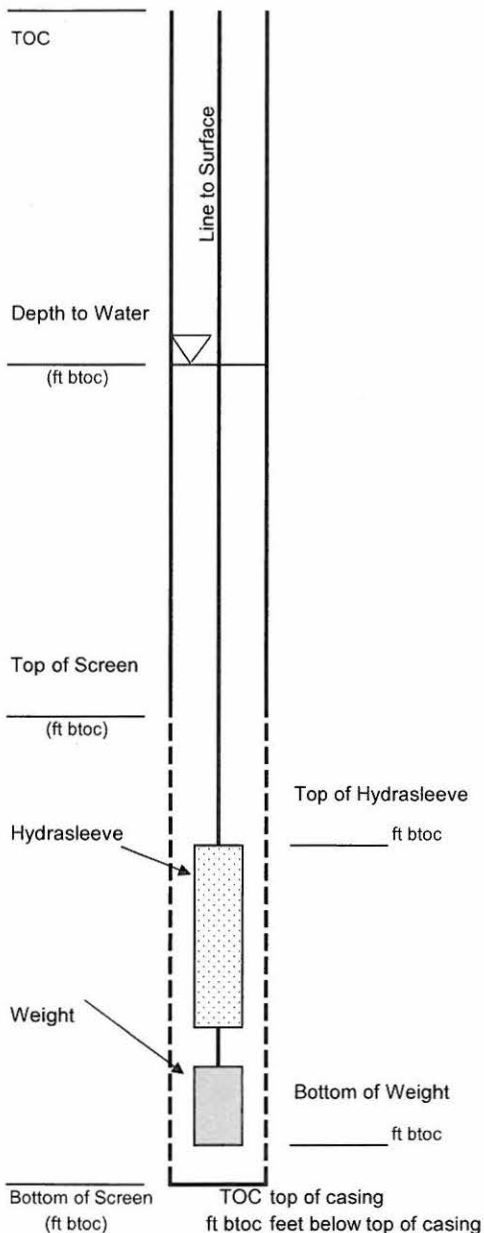
6" = 1.47

1.25" = 0.06

2" = 0.16

3" = 0.37

4" = 0.65



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 11-12-14

Time Removed: 0905

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | | |
|--|-------------------------------|--------------------------|
| Sample ID: <u>GWM-25(20141112)</u> | | Sample Time: <u>0905</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: <u>GWM-25(20141112)</u> | | Sample Time: <u>0905</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: _____ | | Sample Time: _____ |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: _____ | | Sample Time: _____ |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample Notes: _____ | | |

Well Information

| | |
|---|--|
| Well Locked at Arrival: <u>Yes</u> / No | Well Locked at Departure: <u>Yes</u> / No |
| Condition of Well: <u>Good</u> | Well Completion: <u>Flush Mount</u> / Stick Up |

* Bolts on well cover intact, no lock on J-plug. mt

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-2d

Project Number: MH001026.0002

HydraSleeve Size: 1 1/4 in

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11/11/14

Weather: Cold

Time Installed: 0930

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch Sch 40

Gallons/Foot: _____

Total Depth (btoc): _____

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

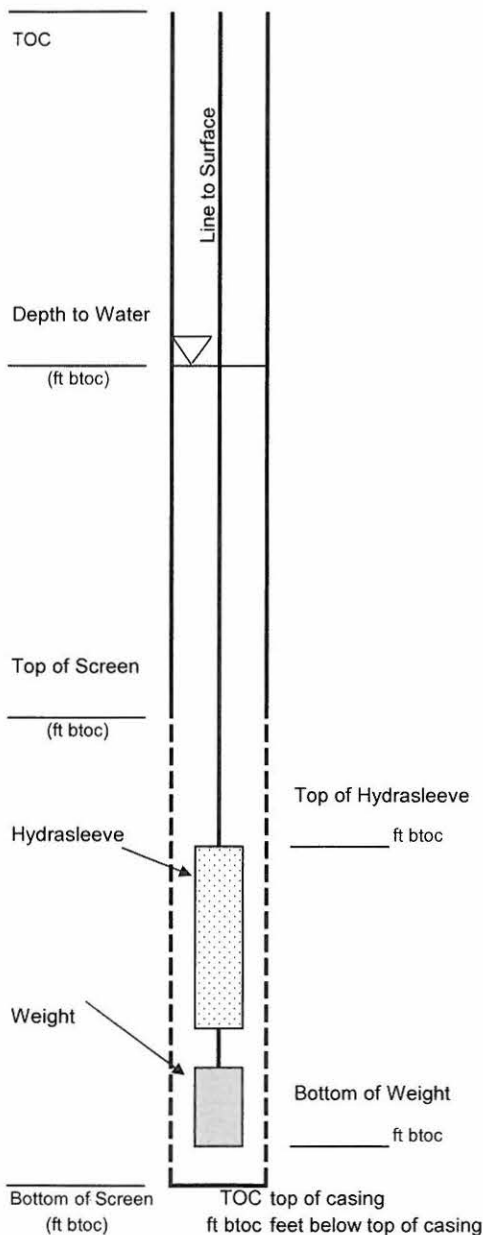
1" = 0.04
1.25" = 0.06

1.5" = 0.09
2" = 0.16

2.5" = 0.26
3" = 0.37

3.5" = 0.50
4" = 0.65

6" = 1.47



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-12-14

Time Removed 0850

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | |
|--|---|
| Sample ID: <u>GWM-2D(20141112)</u> | Sample Time: <u>0850</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |
| Sample ID: <u>GWM-2D(20141112)</u> | Sample Time: <u>0850</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |
| Sample ID: | Sample Time: |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |
| Sample ID: | Sample Time: |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |
| Sample Notes: _____ | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: Good

Well Completion: Flush Mount / Stick Up

Bolts on wellcover intact, no lock on T-peg. MA

ARCADIS

Groundwater Sampling Form

Well ID: 6WM-2B

Project Number: KC001649.0001

Sample Identification: 6WM-2B(20141114)

Site: 2251 Armour Road Site

Sample Date: 11-14-14

Sampled By: MA

Sampling Time: 1630

Weather: Cold, windy

Duplicate/QA/QC: Dup / MS / MSD / EB

Instrument Identification

| Instrument: | Water Quality Meter | Water Quality Meter |
|-------------|---------------------|---------------------------|
| | | <u>YSI 536 - La Motte</u> |
| Serial #: | | |

Purging Information

Casing Material: PVC / SS

Purge Method: (circle one) Submersible Bladder Bailer Peristaltic

Casing Diameter: 2 inch

Well Screen (ft btoc) From: _____ To: _____

Total Depth (btoc): 99.49

Pump Depth: _____ ft btoc

Depth to Water (btoc): 19.29'

Volumes to be Purged: _____ Gallon / Liter

Water Column: 80-2

Total Volume Purged: _____ Gallon / Liter

Gallons/Foot: 0.16

Pump Start Time: _____ Stop Time: _____

Gallons in Well: 12.832

Well Casing Volumes

1" = 0.04 1.5" = 0.09 2.5" = 0.26 3.5" = 0.50 6" = 1.47
Gallons/Foot 1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65

Field Parameter Measurements During Purging

| Time | Minutes Elapsed | Rate (gpm or ml) | Volume Purged | Depth to Water | pH (SI Units) | Conductivity (µmhos/cm) | Turbidity (NTUs) | Diss. Oxygen | Temp (°C or °F) | ORP (mV) | Comments: |
|-------------|-----------------|------------------|---------------|----------------|---------------|-------------------------|------------------|--------------|-----------------|--------------|-----------|
| <u>1545</u> | <u>0</u> | <u>200</u> | <u>0</u> | <u>19.29'</u> | | | | | | | |
| <u>1550</u> | <u>5</u> | | <u>1000</u> | <u>19.29'</u> | <u>6.77</u> | <u>1.129</u> | <u>1.94</u> | <u>4.62</u> | <u>14.04</u> | <u>-60.0</u> | |
| <u>1555</u> | <u>10</u> | | <u>2000</u> | <u>19.29'</u> | <u>6.78</u> | <u>1.110</u> | <u>1.78</u> | <u>1.24</u> | <u>14.12</u> | <u>-59.8</u> | |
| <u>1600</u> | <u>15</u> | | <u>3000</u> | <u>19.29'</u> | <u>6.78</u> | <u>1.109</u> | <u>1.41</u> | <u>0.98</u> | <u>14.16</u> | <u>-59.7</u> | |
| <u>1605</u> | <u>20</u> | | <u>4000</u> | <u>19.29'</u> | <u>6.78</u> | <u>1.104</u> | <u>1.46</u> | <u>0.97</u> | <u>14.24</u> | <u>-59.4</u> | |
| <u>1610</u> | <u>25</u> | | <u>5000</u> | | <u>6.78</u> | <u>0.989</u> | <u>1.36</u> | <u>0.94</u> | <u>14.24</u> | <u>-58.9</u> | |
| <u>1615</u> | <u>30</u> | | <u>6000</u> | | <u>6.77</u> | <u>0.988</u> | <u>1.31</u> | <u>0.93</u> | <u>14.23</u> | <u>-58.8</u> | |
| <u>1620</u> | <u>35</u> | | <u>7000</u> | | <u>6.77</u> | <u>0.989</u> | | <u>0.90</u> | <u>14.24</u> | <u>-58.7</u> | |
| <u>1625</u> | <u>40</u> | | <u>8000</u> | | <u>6.77</u> | <u>0.990</u> | | <u>0.89</u> | <u>14.24</u> | <u>-58.8</u> | |
| <u>1630</u> | <u>45</u> | | <u>9000</u> | | <u>6.77</u> | <u>0.989</u> | | <u>0.91</u> | <u>14.24</u> | <u>-58.8</u> | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| Constituents Sampled | Container Description | |
|-----------------------------|-----------------------|------------------------------------|
| | From Lab | TestAmerica-Nashville Preservative |
| Arsenic - Total (6010C) | 250 mL Plastic | Nitric Acid |
| Arsenic - Dissolved (6010C) | 250 mL Plastic | None |

Well Information

Well Locked at Arrival: Yes / No Well Locked at Departure: Yes / No

Condition of Well: good Well Completion: Flush Mount / Stick Up

* Bolts on well cover intact, no lock on T-plug.

MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-38

Project Number: MH001026.0002

HydraSleeve Size: 1 1/2 in

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11/11/14

Weather: LCU

Time Installed: 1020

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 in

Gallons/Foot: _____

Total Depth (btoc): 32.09'

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

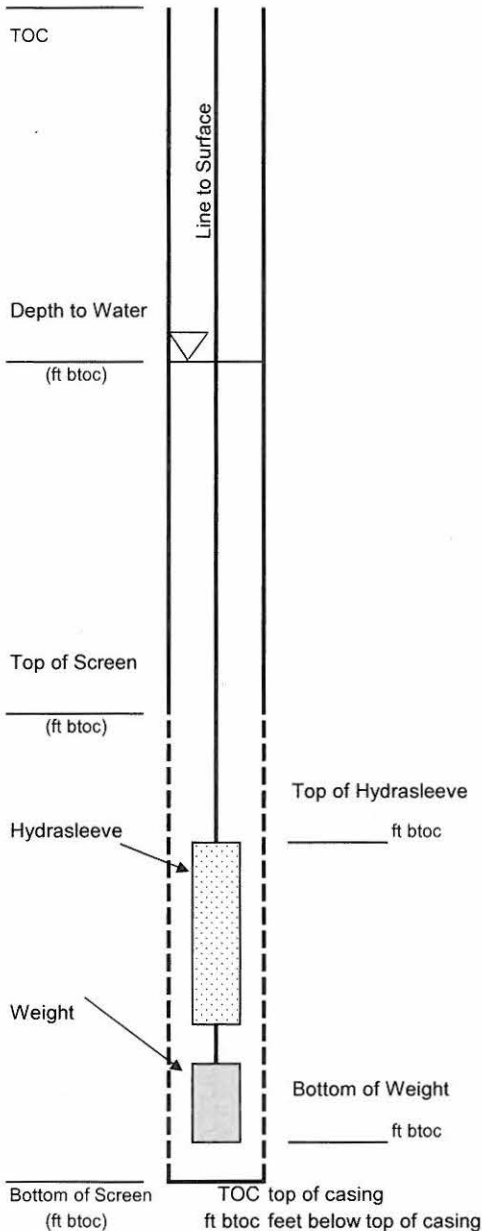
1" = 0.04
1.25" = 0.06

1.5" = 0.09
2" = 0.16

2.5" = 0.26
3" = 0.37

3.5" = 0.50
4" = 0.65

6" = 1.47



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 11-12-14

Time Removed: 1000

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: 11-12-14 (MA)

Sample Date: 1000

Sample Analysis

| | |
|--|---|
| Sample ID: <u>GWM-38 (2011/11/12)</u> | Sample Time: <u>1000</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: <u>GWM-38 (2011/11/12)</u> | Sample Time: <u>1000</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: _____ | Sample Time: _____ |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: _____ | Sample Time: _____ |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample Notes: _____ | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

* Bolts on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID:

GWM-3B

Project Number: MH001026.0002

HydraSleeve Size: 1 line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11/11/14

Weather: cold

Time Installed: 0945

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): Sch 40

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

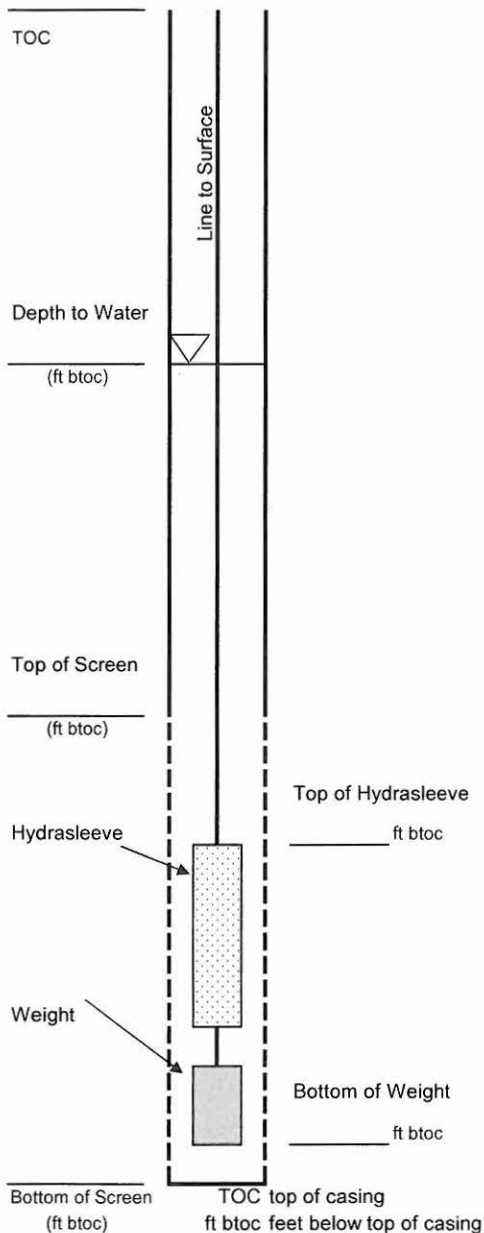
1" = 0.04
1.25" = 0.06

1.5" = 0.09
2" = 0.16

2.5" = 0.26
3" = 0.37

3.5" = 0.50
4" = 0.65

6" = 1.47



Groundwater Sample Collection Information

Sleeve Removal:

Date Removed

11-12-14

Time Removed

0930

Sleeve Removal Post Low Flow Sample Collection?

Yes / No

Sample Identification:

Sample Personnel:

MA

Sample Date:

11/12/14

Sample Analysis

Sample ID: GWM-3B (2014/11/12)

Sample Time: 0930

COC: Total Arsenic (6010C)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Not Filtered

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample ID: GWM-3B (2014/11/12)

Sample Time: 0930

COC: Dissolved Arsenic (6010C)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample ID:

Sample Time:

COC: Total Arsenic (7062)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample ID:

Sample Time:

COC: Dissolved Arsenic (7062)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample Notes:

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure:

Yes / No

Condition of Well: Good

Well Completion:

Flush Mount / Stick Up

* Bolts on well cover intact, no lock on T-plug MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID:

GWM-3D

Project Number: MH001026.0002

HydraSleeve Size: 1 1/2 in

Site: 2251 Armour Road Site

Weight Description:

Sleeve Installed By: MA

Date Installed: 11/11/14

Weather: Cold

Time Installed: 1015

Casing Material: PVC

Water Column:

Casing Diameter: 2 inch

Gallons/Foot:

Total Depth (btoc): 52.04'

Gallons in Well:

Well Casing Volumes (Gallons/Foot)

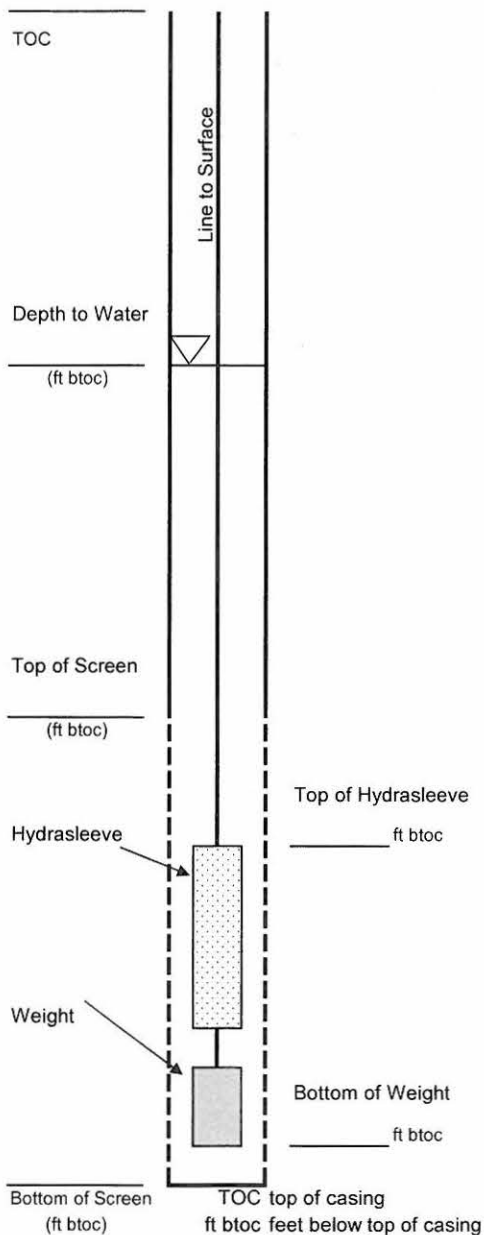
1" = 0.04
1.25" = 0.06

1.5" = 0.09
2" = 0.16

2.5" = 0.26
3" = 0.37

3.5" = 0.50
4" = 0.65

6" = 1.47



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-12-14

Time Removed 0945

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: 0945 MA

Sample Date: 11-12-14

Sample Analysis

Sample ID: GWM-3D(20141112) Sample Time: 0945

COC: Total Arsenic (6010C) Preservative: HNO3 Bottle Size: 250 mL

Field Filtered & Type: Not Filtered For Lab Filtration: No

QA/QC ID: Sample Time:

Sample ID: GWM-3D(20141112) Sample Time: 0945

COC: Dissolved Arsenic (6010C) Preservative: HNO3 Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm For Lab Filtration: No

QA/QC ID: Sample Time:

Sample ID: Sample Time:

COC: Total Arsenic (7062) Preservative: HNO3 Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm For Lab Filtration: No

QA/QC ID: Sample Time:

Sample ID: Sample Time:

COC: Dissolved Arsenic (7062) Preservative: HNO3 Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm For Lab Filtration: No

QA/QC ID: Sample Time:

Sample Notes:

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

* Both on each cover intact, no lock on J-phyg. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-45

Project Number: MH001026.0002

HydraSleeve Size: 1-L

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 1345

Casing Material: NC

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 30.92'

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

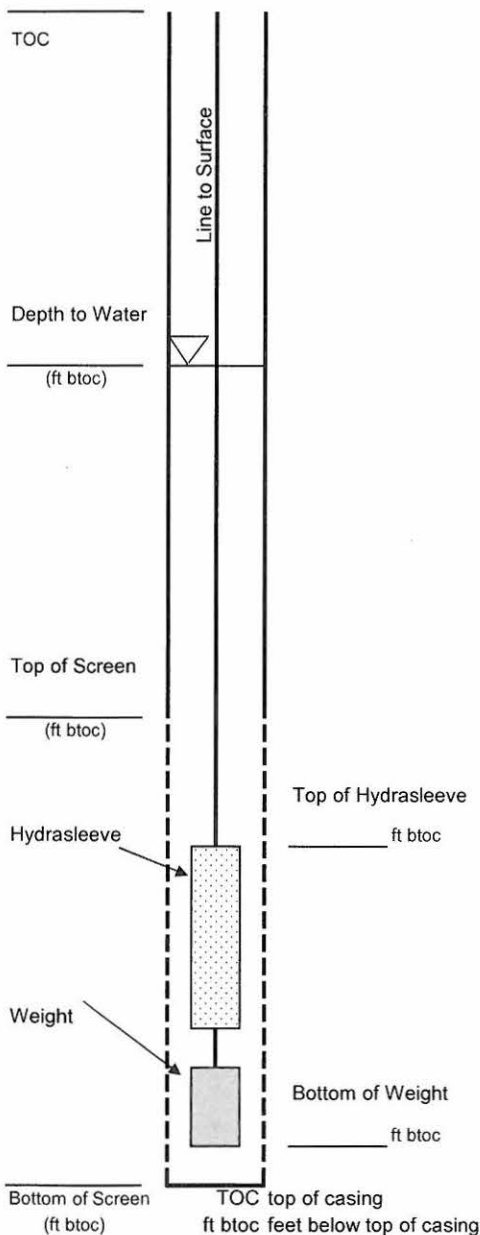
1" = 0.04
1.25" = 0.06

1.5" = 0.09
2" = 0.16

2.5" = 0.26
3" = 0.37

3.5" = 0.50
4" = 0.65

6" = 1.47



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 11-12-14

Time Removed: 1430

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | |
|--|---|
| Sample ID: <u>GWM-45 (20141112)</u> | Sample Time: <u>1430</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: <u>FB</u> | Sample Time: _____ |
| Sample ID: <u>GWM-45 (20141112)</u> | Sample Time: <u>1430</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: <u>GWM-45 (20141112)</u> | Sample Time: <u>1430</u> |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: <u>FB-02 (20141112)</u> | Sample Time: <u>1430</u> |
| Sample ID: <u>GWM-45 (20141112)</u> | Sample Time: <u>1430</u> |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: <u>FB-02 (20141112)</u> | Sample Time: <u>1430</u> |
| Sample Notes: _____ | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

Bolts on well cover intact, no lock on T-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-4D

Project Number: MH001026.0002

HydraSleeve Size: 1-L

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cold

Time Installed: 1355

Casing Material: PVC

Water Column: _____

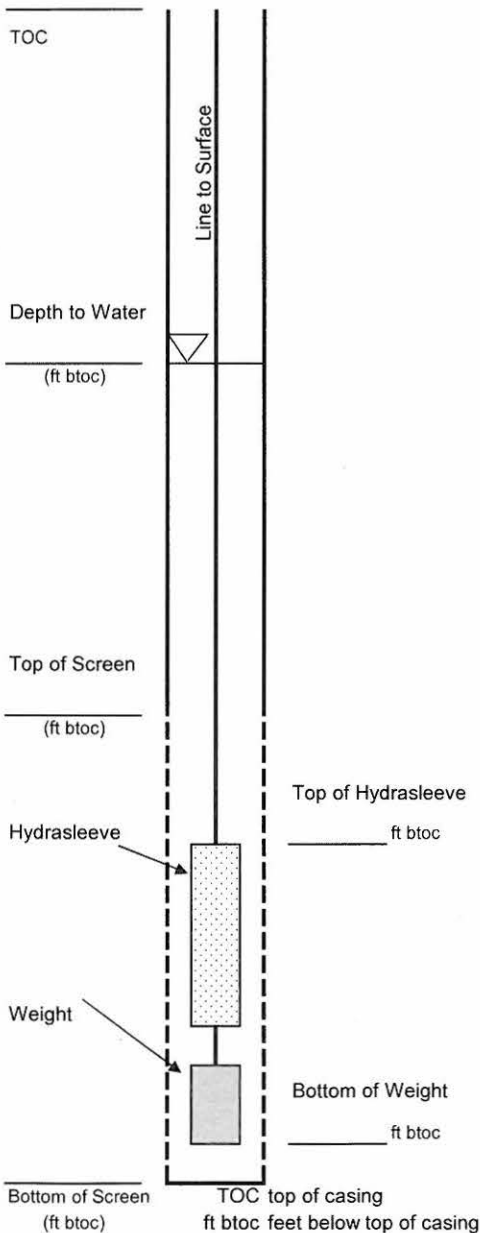
Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 51.10'

Gallons in Well: _____

| | | | | | |
|--|---------------------------|--------------------------|--------------------------|--------------------------|-----------|
| Well Casing Volumes (Gallons/Foot) | 1" = 0.04 1.25" = 0.06 | 1.5" = 0.09 2" = 0.16 | 2.5" = 0.26 3" = 0.37 | 3.5" = 0.50 4" = 0.65 | 6" = 1.47 |
|--|---------------------------|--------------------------|--------------------------|--------------------------|-----------|



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-12-14
Time Removed 1445
Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:
Sample Personnel: MA
Sample Date: 11-12-14

| Sample Analysis | | | |
|--|--|-------------------------------|---------------------|
| Sample ID: <u>GWM-4D (2014/11/12)</u> | | Sample Time: <u>1445</u> | |
| COC: Total Arsenic (6010C) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: <u>1</u> | | Sample Time: _____ | |
| Sample ID: <u>GWM-4D (2014/11/12)</u> | | Sample Time: <u>1445</u> | |
| COC: Dissolved Arsenic (6010C) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | | Sample Time: _____ | |
| Sample ID: <u>GWM-4D (2014/11/12)</u> | | Sample Time: <u>1445</u> | |
| COC: Total Arsenic (7062) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | | Sample Time: _____ | |
| Sample ID: <u>GWM-4D (2014/11/12)</u> | | Sample Time: <u>1445</u> | |
| COC: Dissolved Arsenic (7062) | | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | | Sample Time: _____ | |
| Sample Notes: _____ | | | |
| _____ | | | |

Well Information

| | |
|---|--|
| Well Locked at Arrival: <u>Yes</u> / No | Well Locked at Departure: <u>Yes</u> / No |
| Condition of Well: <u>good</u> | Well Completion: <u>Flush Mount</u> / Stick Up |

*Bolt on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-58

Project Number: MH001026.0002

HydraSleeve Size: 16 in

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: Cold

Time Installed: 1320

Casing Material: N/C

Water Column: _____

Casing Diameter: 2 in

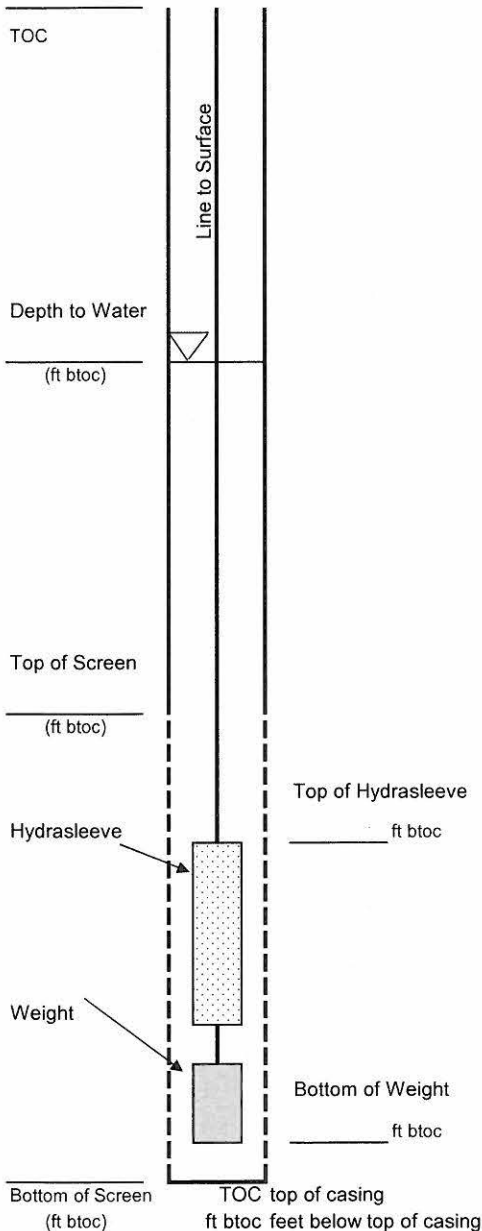
Gallons/Foot: _____

Total Depth (btoc): 28.20'

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

| | | | | |
|--------------|-------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | |



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-12-14
Time Removed 1400
Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:
Sample Personnel: _____
Sample Date: _____

| Sample Analysis | | |
|--|-------------------------------|---------------------|
| Sample ID: <u>GWM-58 (20/4/11/12)</u> | Sample Time: <u>1400</u> | |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: <u>GWM-58 (20/4/11/12)</u> | Sample Time: <u>1400</u> | |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: <u>GWM-58 (20/4/11/12)</u> | Sample Time: <u>1400</u> | |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: <u>GWM-58 (20/4/11/12)</u> | Sample Time: <u>1400</u> | |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample Notes: _____ | | |

Well Information

Well Locked at Arrival: Yes / No Well Locked at Departure: Yes / No
Condition of Well: good Well Completion: Flush Mount / Stick Up

* Bolt on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-5D

Project Number: MH001026.0002

HydraSleeve Size: 1-6" line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 1325

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

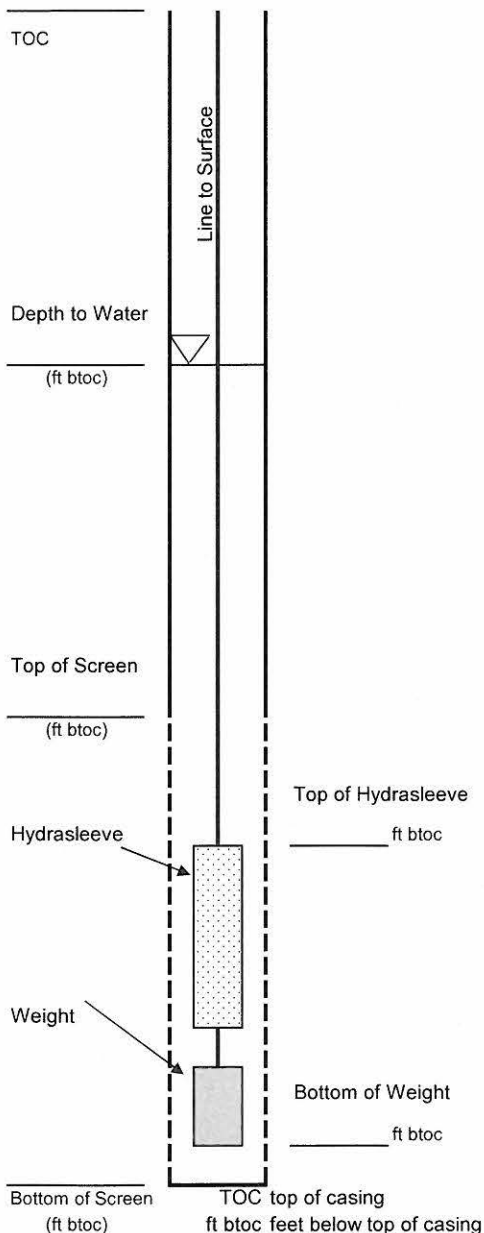
Gallons/Foot: _____

Total Depth (btoc): 50.37'

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

| | | | | |
|--------------|-------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | |



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 11-12-14

Time Removed: 1415

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | |
|--|---|
| Sample ID: <u>GWM-5D (2014/11/12)</u> | Sample Time: <u>1415</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: <u>GWM-5D (2014/11/12)</u> | Sample Time: <u>1415</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: <u>GWM-5D (2014/11/12)</u> | Sample Time: <u>1415</u> |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: <u>GWM-5D (2014/11/12)</u> | Sample Time: <u>1415</u> |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample Notes: _____ | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

* Bolts on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID:

GWM-68

Project Number: MH001026.0002

HydraSleeve Size: 1-line

Site: 2251 Armour Road Site

Weight Description:

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cold

Time Installed: 1230

Casing Material: PVC

Water Column:

Casing Diameter: 2 inch

Gallons/Foot:

Total Depth (btoc): 29.21'

Gallons in Well:

Well Casing Volumes
(Gallons/Foot)

1" = 0.04

1.5" = 0.09

2.5" = 0.26

3.5" = 0.50

6" = 1.47

1.25" = 0.06

2" = 0.16

3" = 0.37

4" = 0.65

Groundwater Sample Collection Information

Sleeve Removal:

Date Removed

11-12-14

Time Removed

1220

Sleeve Removal Post Low Flow Sample Collection?

Yes / No

Sample Identification:

Sample Personnel:

MA

Sample Date:

11-12-14

Sample Analysis

Sample ID:

GWM-68 (20141112)

Sample Time:

1220

COC: Total Arsenic (6010C)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Not Filtered

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample ID:

GWM-68 (20141112)

Sample Time:

1220

COC: Dissolved Arsenic (6010C)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample ID:

GWM-68 (20141112)

Sample Time:

1220

COC: Total Arsenic (7062)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample ID:

GWM-68 (20141112)

Sample Time:

1220

COC: Dissolved Arsenic (7062)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample Notes:

TOC

Line to Surface

Depth to Water

(ft btoc)

Top of Screen

(ft btoc)

Hydrasleeve

Top of Hydrasleeve

ft btoc

Weight

Bottom of Weight

ft btoc

Bottom of Screen

(ft btoc)

TOC top of casing

ft btoc feet below top of casing

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure:

Yes

No

Condition of Well:

good

Well Completion:

Flush Mount / Stick Up

Bottom well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-8D

Project Number: MH001026.0002

HydraSleeve Size: 1-line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 1500

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 48.90'

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

1" = 0.04 1.5" = 0.09 2.5" = 0.26 3.5" = 0.50 6" = 1.47
1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65

TOC

Depth to Water

(ft btoc)

Top of Screen

(ft btoc)

Hydrasleeve

Weight

Bottom of Screen
(ft btoc)

Line to Surface

Top of Hydrasleeve

ft btoc

Bottom of Weight

ft btoc

TOC top of casing
ft btoc feet below top of casing

Groundwater Sample Collection Information

Sleeve Removal:

Date Removed

11-13-14

Time Removed

1330

Sleeve Removal Post Low Flow Sample Collection?

Yes / No

Sample Identification:

Sample Personnel:

MA

Sample Date:

11-13-14

Sample Analysis

Sample ID: GWM-BD(20141113)

Sample Time: 1330

COC: Total Arsenic (6010C)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Not Filtered

For Lab Filtration: No

QA/QC ID: FB-03(20141113)

Sample Time: 1400

Sample ID: GWM-8D(20141113)

Sample Time: 1330

COC: Dissolved Arsenic (6010C)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID: FB-03(20141113)

Sample Time: 1400

Sample ID:

Sample Time:

COC: Total Arsenic (7062)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample ID:

Sample Time:

COC: Dissolved Arsenic (7062)

Preservative: HNO3

Bottle Size: 250 mL

Field Filtered & Type: Yes 0.45 µm

For Lab Filtration: No

QA/QC ID:

Sample Time:

Sample Notes:

Well Information

Well Locked at Arrival:

Yes

No

Well Locked at Departure:

Yes

/

No

Condition of Well:

Good

Well Completion:

Flush Mount

/ Stick Up

* Bolts on well cover intact, no lock on J-plug. MA

ARCADIS

Groundwater Sampling Form

Well ID: GWM-BB

Project Number: KC001649.0001

Sample Identification: GWM-BB(20141117)

Site: 2251 Armour Road Site

Sample Date: 11-17-14

Sampled By: MA

Sampling Time: 1700

Weather: Cold, windy

Duplicate/QA/QC: Dup / MS / MSD / EB

Instrument Identification

| Instrument: | Water Quality Meter | Water Quality Meter |
|-------------|---------------------|----------------------------------|
| | | <u>YSI⁵⁸, LaMotte</u> |
| Serial #: | | |

Purging Information

Casing Material: PVC / SS

Purge Method: (circle one) Submersible Bladder Bailer Peristaltic

Casing Diameter: 2 inch

Well Screen (ft btoc) From: _____ To: _____

Total Depth (btoc): 107.66

Pump Depth: _____ ft btoc

Depth to Water (btoc): 22.28

Volumes to be Purged: _____ Gallon / Liter

Water Column: 85.38

Total Volume Purged: _____ Gallon / Liter

Gallons/Foot: 0.16

Pump Start Time: _____ Stop Time: _____

Gallons in Well: 13.661

Well Casing Volumes

| | | | | |
|--------------|--------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| Gallons/Foot | 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 |

Field Parameter Measurements During Purging

| Time | Minutes Elapsed | Rate (gpm or ml) | Volume Purged | Depth to Water | pH (SI Units) | Conductivity (µmhos/cm) | Turbidity (NTUs) | Diss. Oxygen | Temp (°C or °F) | ORP (mV) | Comments: |
|------|-----------------|------------------|---------------|----------------|---------------|-------------------------|------------------|--------------|-----------------|---------------|-----------|
| 1620 | 0 | <u>200</u> | <u>0</u> | <u>22.28</u> | | | | | | | |
| 1625 | 5 | <u>↓</u> | <u>1000</u> | <u>22.28</u> | <u>6.52</u> | <u>1.417</u> | <u>4.62</u> | <u>3.84</u> | <u>15.46</u> | <u>-110.6</u> | |
| 1630 | 10 | <u>↓</u> | <u>2000</u> | <u>22.29</u> | <u>6.56</u> | <u>1.411</u> | <u>2.20</u> | <u>3.41</u> | <u>15.49</u> | <u>-171.4</u> | |
| 1635 | 15 | <u>↓</u> | <u>3000</u> | <u>22.29</u> | <u>6.53</u> | <u>1.409</u> | <u>2.08</u> | <u>2.26</u> | <u>15.62</u> | <u>-108.6</u> | |
| 1640 | 20 | <u>↓</u> | <u>4000</u> | <u>22.29</u> | <u>6.53</u> | <u>1.408</u> | <u>1.84</u> | <u>0.98</u> | <u>15.67</u> | <u>-108.4</u> | |
| 1645 | 25 | <u>↓</u> | <u>5000</u> | <u>↓</u> | <u>6.53</u> | <u>1.410</u> | <u>1.78</u> | <u>0.87</u> | <u>15.67</u> | <u>-108.2</u> | |
| 1650 | 30 | <u>↓</u> | <u>6000</u> | <u>↓</u> | <u>6.53</u> | <u>1.410</u> | <u>↓</u> | <u>0.86</u> | <u>15.66</u> | <u>-107.4</u> | |
| 1655 | 35 | <u>↓</u> | <u>7000</u> | <u>↓</u> | <u>6.53</u> | <u>1.410</u> | <u>↓</u> | <u>0.86</u> | <u>15.68</u> | <u>-107.5</u> | |
| 1700 | 40 | <u>↓</u> | <u>8000</u> | <u>↓</u> | <u>6.53</u> | <u>1.410</u> | <u>↓</u> | <u>0.86</u> | <u>15.68</u> | <u>-107.4</u> | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| Constituents Sampled | Container Description | |
|-----------------------------|-----------------------|--------------|
| | From Lab | Preservative |
| Arsenic - Total (6010C) | 250 mL Plastic | Nitric Acid |
| Arsenic - Dissolved (6010C) | 250 mL Plastic | None |

Well Information

| | |
|---|--|
| Well Locked at Arrival: <u>Yes</u> / No | Well Locked at Departure: <u>Yes</u> / No |
| Condition of Well: <u>good</u> | Well Completion: <u>Flush Mount</u> / Stick Up |

* Bolt on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-9D

Project Number: MH001026.0002

HydraSleeve Size: 1-line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: Cold

Time Installed: 1100

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 40.40'

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

1" = 0.04

1.5" = 0.09

2.5" = 0.26

3.5" = 0.50

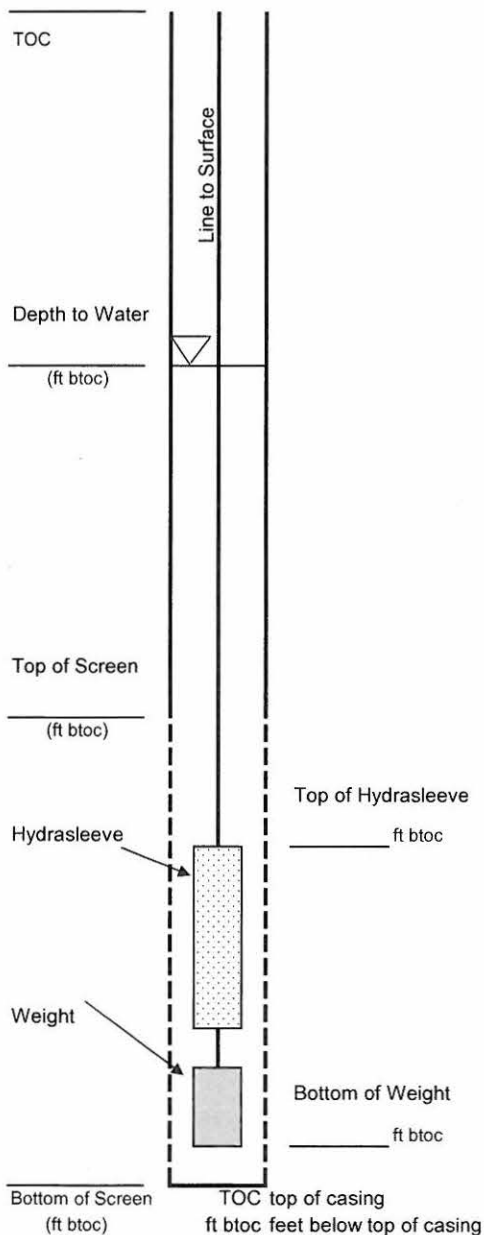
6" = 1.47

1.25" = 0.06

2" = 0.16

3" = 0.37

4" = 0.65



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-12-14

Time Removed 1050

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MAA

Sample Date: 11-12-14

Sample Analysis

| | | | |
|-------------------------------------|--|------------------------|---------------------|
| Sample ID: GWM-9D(20141112) | | Sample Time: 1050 | |
| COC: Total Arsenic (6010C) | | Preservative: HNO3 | Bottle Size: 250 mL |
| Field Filtered & Type: Not Filtered | | For Lab Filtration: No | |
| QA/QC ID: | | Sample Time: | |
| Sample ID: GWM-9D(20141112) | | Sample Time: 1050 | |
| COC: Dissolved Arsenic (6010C) | | Preservative: HNO3 | Bottle Size: 250 mL |
| Field Filtered & Type: Yes 0.45 µm | | For Lab Filtration: No | |
| QA/QC ID: | | Sample Time: | |
| Sample ID: | | Sample Time: | |
| COC: Total Arsenic (7062) | | Preservative: HNO3 | Bottle Size: 250 mL |
| Field Filtered & Type: Yes 0.45 µm | | For Lab Filtration: No | |
| QA/QC ID: | | Sample Time: | |
| Sample ID: | | Sample Time: | |
| COC: Dissolved Arsenic (7062) | | Preservative: HNO3 | Bottle Size: 250 mL |
| Field Filtered & Type: Yes 0.45 µm | | For Lab Filtration: No | |
| QA/QC ID: | | Sample Time: | |
| Sample Notes: | | | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

bolts on well cover intact, no lock on J-plug.

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-9B

Project Number: MH001026.0002

HydraSleeve Size: 1-1/2 in

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: Good

Time Installed: 1105

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 in

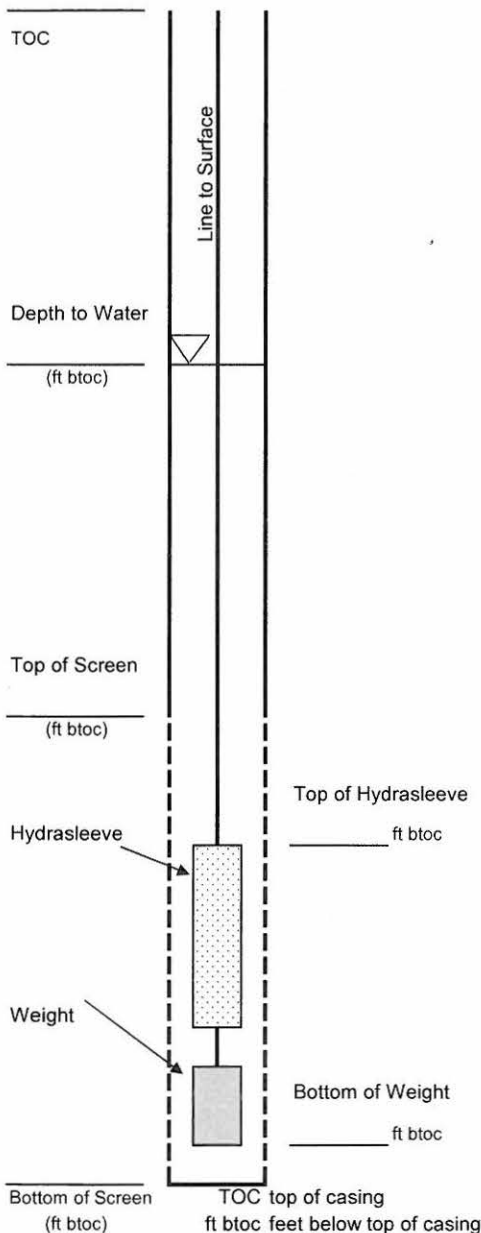
Gallons/Foot: _____

Total Depth (btoc): 111.56

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

| | | | | |
|--------------|-------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | |



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 11-12-14

Time Removed: 1110

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | |
|--|---|
| Sample ID: <u>GWM-9B(20141112)</u> | Sample Time: <u>1110</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: <u>GWM-9B(20141112)</u> | Sample Time: <u>1110</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: _____ | Sample Time: _____ |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: _____ | Sample Time: _____ |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample Notes: _____ | |

Well Information

| | |
|---|--|
| Well Locked at Arrival: <u>Yes</u> / No | Well Locked at Departure: <u>Yes</u> / No |
| Condition of Well: <u>good</u> | Well Completion: <u>Flush Mount / Stick Up</u> |

* Bolts on well cover intact, no lock on J- plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-11B

Project Number: MH001026.0002

HydraSleeve Size: 1-line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: Cold

Time Installed: 1035

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 94.46'

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

1" = 0.04

1.5" = 0.09

2.5" = 0.26

3.5" = 0.50

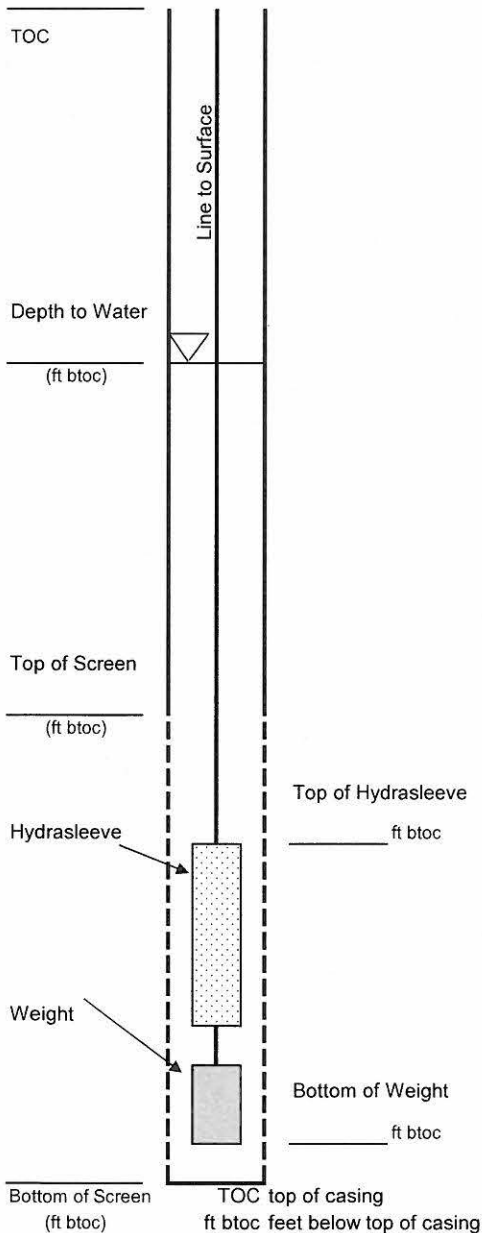
6" = 1.47

1.25" = 0.06

2" = 0.16

3" = 0.37

4" = 0.65



Groundwater Sample Collection Information

Sleeve Removal:

Date Removed: 11-12-14

Time Removed: 1015

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | |
|--|---|
| Sample ID: <u>GWM-11B(20141112)</u> | Sample Time: <u>1015</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |
| Sample ID: <u>GWM-11B(20141112)</u> | Sample Time: <u>1015</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |
| Sample ID: | Sample Time: |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |
| Sample ID: | Sample Time: |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: | Sample Time: |

Sample Notes: _____

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

* bo lbs on well cover intact, no lock on T-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: Shady-11D

Project Number: MH001026.0002

HydraSleeve Size: 1-1/2" line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 1040

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

Gallons/Foot: _____

Total Depth (btoc): 91.90'

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

1" = 0.04

1.5" = 0.09

2.5" = 0.26

3.5" = 0.50

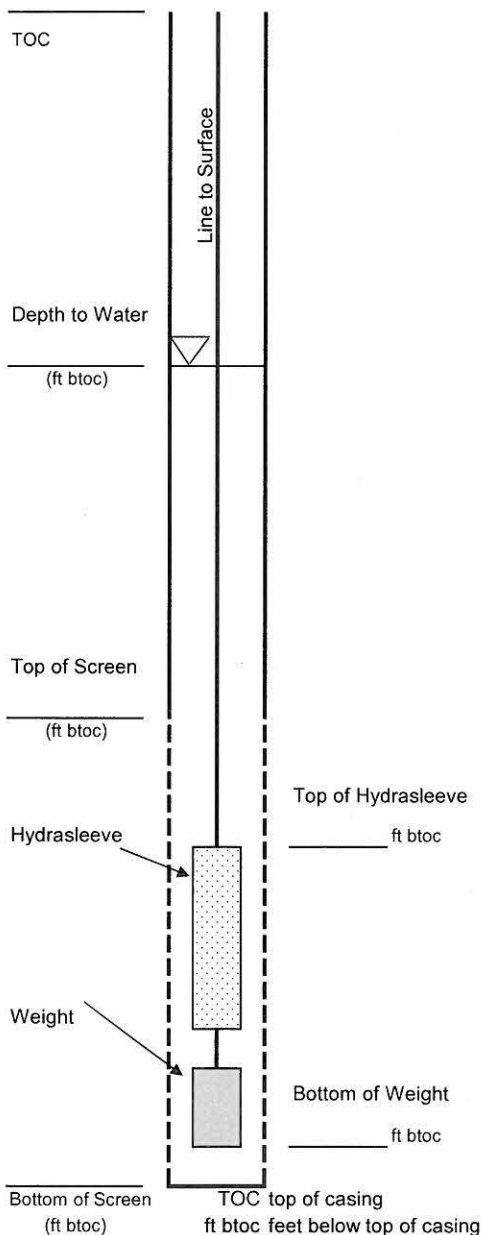
6" = 1.47

1.25" = 0.06

2" = 0.16

3" = 0.37

4" = 0.65



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-12-14

Time Removed 1030

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | | |
|--|-------------------------------|--------------------------|
| Sample ID: <u>GWM-R1D(20141112)</u> | | Sample Time: <u>1030</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: <u>P</u> | Sample Time: _____ | |
| Sample ID: <u>GWM-11D(20141112)</u> | | Sample Time: <u>1030</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: _____ | | Sample Time: _____ |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: _____ | | Sample Time: _____ |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample Notes: _____ | | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

* Both on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-12

Project Number: MH001026.0002

HydraSleeve Size: 1-line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 1200

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

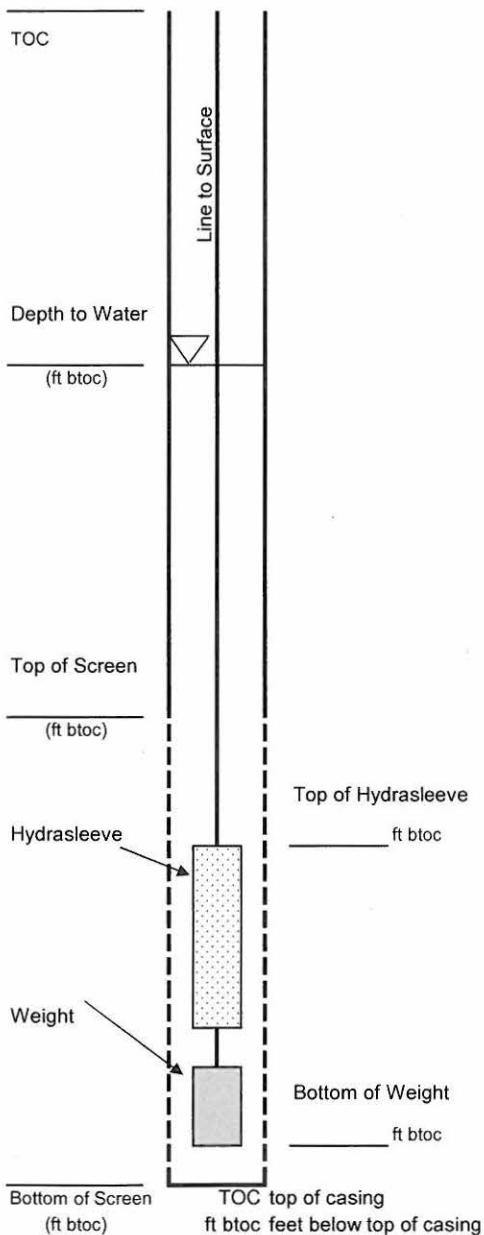
Gallons/Foot: _____

Total Depth (btoc): 28.75'

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

| | | | | |
|--------------|-------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | |



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-12-14
Time Removed 1145
Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:
Sample Personnel: MA
Sample Date: 11-28-14

| Sample Analysis | | |
|--|-------------------------------|---------------------|
| Sample ID: <u>GWM-12(20141112)</u> | Sample Time: <u>1145</u> | |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: | Sample Time: | |
| Sample ID: <u>GWM-12(20141112)</u> | Sample Time: <u>1145</u> | |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: | Sample Time: | |
| Sample ID: | Sample Time: | |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: | Sample Time: | |
| Sample ID: | Sample Time: | |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: | Sample Time: | |
| Sample Notes: _____ | | |

Well Information

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Condition of Well: good
Well Completion: Flush Mount / Stick Up

* Bottle on well cover intact, no lock on J-plug. MA.

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-138

Project Number: MH001026.0002

HydraSleeve Size: 1-line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 12:50

Casing Material: 1VC

Water Column: _____

Casing Diameter: 21 inch

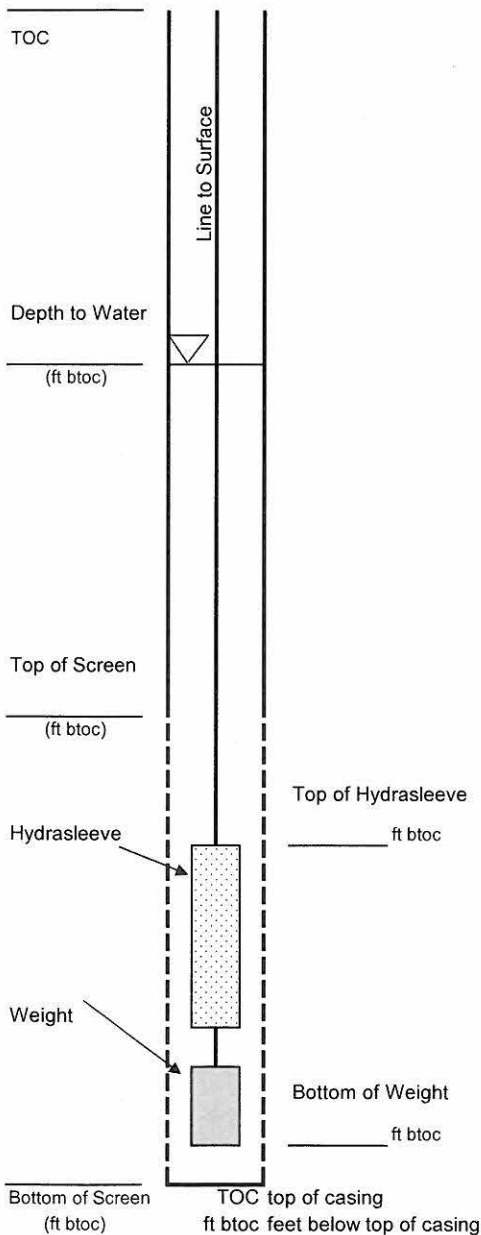
Gallons/Foot: _____

Total Depth (btoc): 24.53'

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

| | | | | |
|--------------|-------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | |



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 11-12-14

Time Removed: 1300

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | |
|--|---|
| Sample ID: <u>GWM-138(2014/11/12)</u> | Sample Time: <u>1300</u> |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: <u>GWM-138(2014/11/12)</u> | Sample Time: <u>1300</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: _____ | Sample Time: _____ |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample ID: _____ | Sample Time: _____ |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> |
| QA/QC ID: _____ | Sample Time: _____ |
| Sample Notes: _____ | |

Well Information

| | |
|---|---|
| Well Locked at Arrival: <u>Yes</u> / No | Well Locked at Departure: <u>Yes</u> / No |
| Condition of Well: <u>good</u> | Well Completion: <u>Rush Mount / Stick Up</u> |

* Bolts on well cover intact, no lock on J-plug. MA

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID:

GWM-13D

Project Number: MH001026.0002

HydraSleeve Size: 1-litre

Site: 2251 Armour Road Site

Weight Description:

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cold

Time Installed: 1300

Casing Material: PVC

Water Column:

Casing Diameter: 2 inch

Gallons/Foot:

Total Depth (btoc): 44.44'

Gallons in Well:

Well Casing Volumes (Gallons/Foot)

1" = 0.04

1.5" = 0.09

2.5" = 0.26

3.5" = 0.50

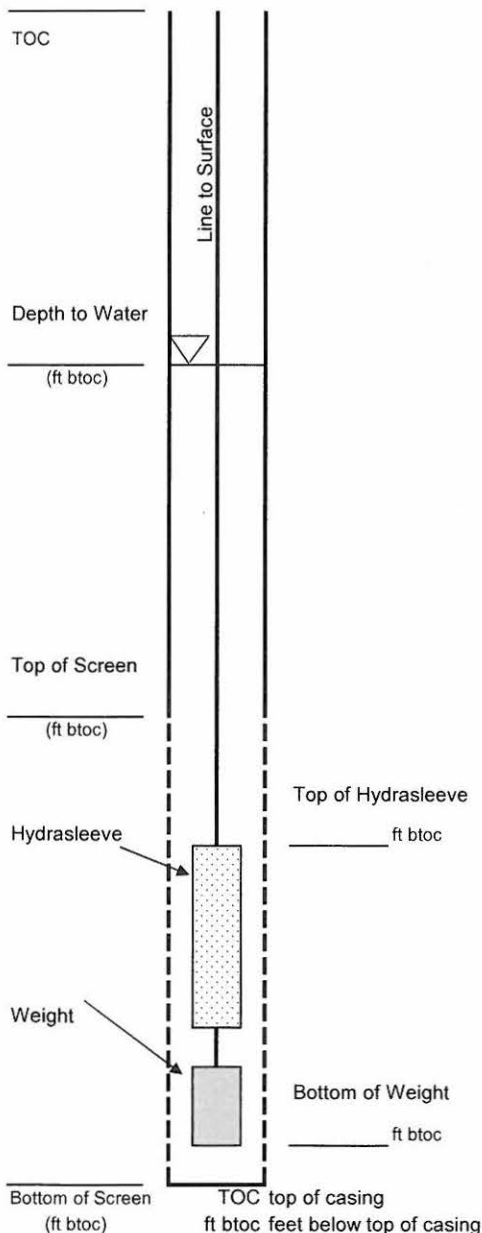
6" = 1.47

1.25" = 0.06

2" = 0.16

3" = 0.37

4" = 0.65



Groundwater Sample Collection Information

Sleeve Removal:

Date Removed: 11-12-14

Time Removed: 1305

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-12-14

Sample Analysis

| | |
|-------------------------------------|---------------------|
| Sample ID: GWM-13D(20141112) | Sample Time: 1315 |
| COC: Total Arsenic (6010C) | Preservative: HNO3 |
| Field Filtered & Type: Not Filtered | Bottle Size: 250 mL |
| For Lab Filtration: No | |
| QA/QC ID: | Sample Time: |
| Sample ID: GWM-13D(20141112) | Sample Time: 1315 |
| COC: Dissolved Arsenic (6010C) | Preservative: HNO3 |
| Field Filtered & Type: Yes 0.45 µm | Bottle Size: 250 mL |
| For Lab Filtration: No | |
| QA/QC ID: | Sample Time: |
| Sample ID: GWM-13D(20141112) | Sample Time: 1315 |
| COC: Total Arsenic (7062) | Preservative: HNO3 |
| Field Filtered & Type: Yes 0.45 µm | Bottle Size: 250 mL |
| For Lab Filtration: No | |
| QA/QC ID: | Sample Time: |
| Sample ID: GWM-13D(20141112) | Sample Time: 1315 |
| COC: Dissolved Arsenic (7062) | Preservative: HNO3 |
| Field Filtered & Type: Yes 0.45 µm | Bottle Size: 250 mL |
| For Lab Filtration: No | |
| QA/QC ID: | Sample Time: |
| Sample Notes: | |

Well Information

| | |
|----------------------------------|---|
| Well Locked at Arrival: Yes / No | Well Locked at Departure: Yes / No |
| Condition of Well: good | Well Completion: Flush Mount / Stick Up |

* bolts on well cover intact, no lock on J-plug. MA.

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-14B

Project Number: MH001026.0002

HydraSleeve Size: good 1-line

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11-11-14

Weather: cloud

Time Installed: 1440

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

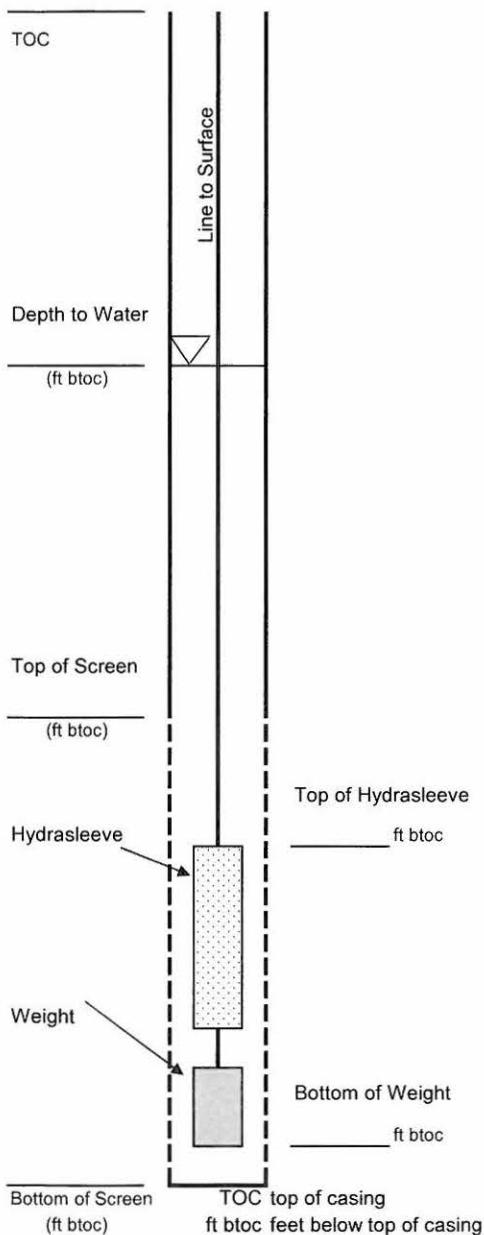
Gallons/Foot: _____

Total Depth (btoc): 108.51'

Gallons in Well: _____

Well Casing Volumes (Gallons/Foot)

| | | | | |
|--------------|-------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | |



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-13-14
Time Removed 1030
Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:
Sample Personnel: MA
Sample Date: 11-13-14

| Sample Analysis | | |
|---|-------------------------------|---------------------|
| Sample ID: <u>GWM-14B(20141113)</u> | Sample Time: <u>1030</u> | |
| COC: Total Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Not Filtered</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: <u>1030</u> | |
| Sample ID: <u>GWM-14B(20141113)</u> | Sample Time: _____ | |
| COC: Dissolved Arsenic (6010C) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: _____ | Sample Time: _____ | |
| COC: Total Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample ID: _____ | Sample Time: _____ | |
| COC: Dissolved Arsenic (7062) | Preservative: <u>HNO3</u> | Bottle Size: 250 mL |
| Field Filtered & Type: <u>Yes 0.45 µm</u> | For Lab Filtration: <u>No</u> | |
| QA/QC ID: _____ | Sample Time: _____ | |
| Sample Notes: <u>from S corner of building walk 14 steps W & 9 steps S.</u> | | |

Well Information

Well Locked at Arrival: Yes / No Well Locked at Departure: Yes / No
Condition of Well: good Well Completion: Flush Mount / Stick Up

*Bo Up on well cover intact, no lock on J-plug not

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-15B

Project Number: MH001026.0002

HydraSleeve Size: 1-L

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: MA

Date Installed: 11.4.14

Weather: cold

Time Installed: 1450

Casing Material: PVC

Water Column: _____

Casing Diameter: 2 inch

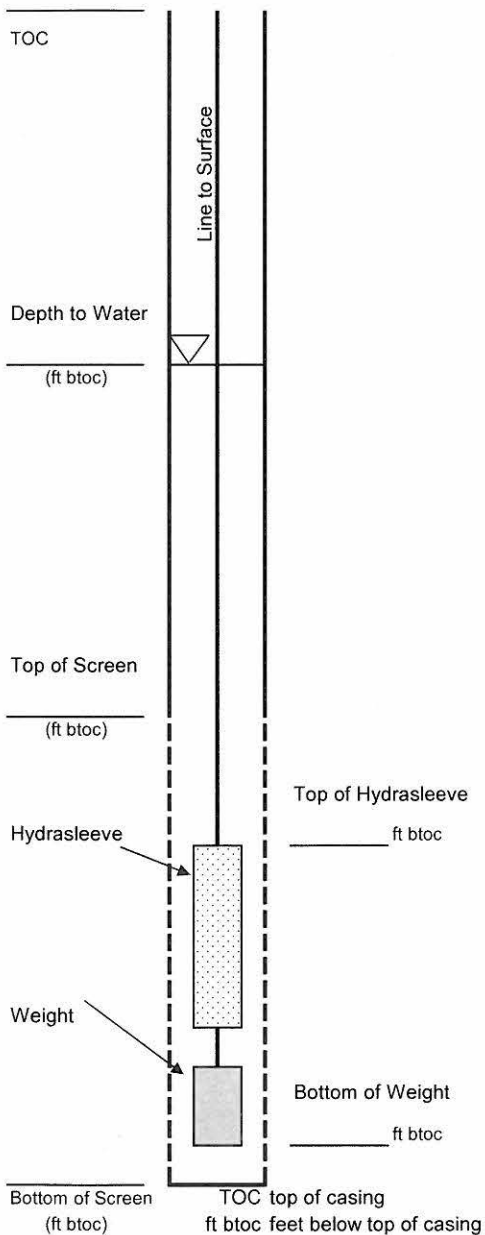
Gallons/Foot: _____

Total Depth (btoc): 120.74

Gallons in Well: _____

Well Casing Volumes

1" = 0.04 1.5" = 0.09 2.5" = 0.26 3.5" = 0.50 6" = 1.47
1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65



Groundwater Sample Collection Information

Sleeve Removal: Date Removed 11-13-14

Time Removed 1110

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: MA

Sample Date: 11-13-14

Sample Analysis

| | |
|-------------------------------------|---|
| Sample ID: <u>GWM-15B(20141113)</u> | Sample Time: <u>1110</u> |
| COC: Total Arsenic (6010C) | Preservative: HNO3 Bottle Size: 250 mL |
| Field Filtered & Type: Not Filtered | For Lab Filtration: No |
| QA/QC ID: | Sample Time: |
| Sample ID: <u>GWM-15B(20141113)</u> | Sample Time: <u>1110</u> |
| COC: Dissolved Arsenic (6010C) | Preservative: HNO3 Bottle Size: 250 mL |
| Field Filtered & Type: Yes 0.45 µm | For Lab Filtration: No |
| QA/QC ID: | Sample Time: |
| Sample ID: | Sample Time: |
| COC: Total Arsenic (7062) | Preservative: HNO3 Bottle Size: 250 mL |
| Field Filtered & Type: Yes 0.45 µm | For Lab Filtration: No |
| QA/QC ID: | Sample Time: |
| Sample ID: | Sample Time: |
| COC: Dissolved Arsenic (7062) | Preservative: HNO3 Bottle Size: 250 mL |
| Field Filtered & Type: Yes 0.45 µm | For Lab Filtration: No |
| QA/QC ID: | Sample Time: |
| Sample Notes: _____ | |

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: good

Well Completion: Flush Mount / Stick Up

* Bolt on well cover intact, no lock on J-plug. MA

Groundwater Sampling Form

Well ID: GWM-02 S (2014/223)
Date: 12/23/14
Sampled By: S. Schmitz
Duplicate/QA/QC: —

| | | |
|-------------|-----|---------------------------------|
| Instrument: | PID | Water Quality Meter(s) |
| Serial #: | | YSI-53B Lamotte turbidity meter |

Purge Method:(circle one) Submersible Centrifugal Bladder Bailer Peristaltic

Screen Interval: From: _____ To: _____

Pump Intake Setting: _____

Volumes to be Purged: _____

Total Volume Purged: _____

Pump On: _____ Off: _____

| Time | Minutes Elapsed | Rate (gpm or ml) | Volume Purged | Depth to Water | pH (SI Units) | Conductivity (µmhos/cm) | Turbidity (NTUs) | Diss. Oxygen | Temp (°C or °F) | ORP (mV) | Comments: |
|------|-----------------|------------------|---------------|----------------|---------------|-------------------------|------------------|--------------|-----------------|----------|-----------|
| 1050 | 0 | 3.0 | | 21.62 | 7.00 | 1.035 | 6.25 | 2.71 | 14.24 | -45.7 | |
| 1055 | 5 | | | | 6.95 | 1.014 | | 1.11 | 14.36 | -46.3 | |
| 1100 | 10 | | | 21.65 | 6.97 | 0.969 | 14.1 | 0.34 | 15.95 | -67.9 | |
| 1105 | 15 | | | | 7.08 | 0.933 | 2.81 | 0.43 | 15.77 | -90.2 | |
| 1110 | 20 | | | 21.62 | 7.11 | 0.929 | | 0.69 | 15.74 | -98.1 | |
| 1115 | 25 | | | | 7.12 | 0.927 | 3.25 | 0.52 | 15.77 | -100.1 | |
| 1120 | Sample | | | | | | | | | | |

sample collected @ 1120
sample ID: GWM-025(20141223).

Purge Water Disposal: on-site water container
Turbidity(qualitative): —
Other (PID, etc.): —

| Constituents Sampled | From Lab <u>X</u> _____ | ARCADIS _____ | Container Description |
|----------------------|-------------------------|---------------|---|
| T. Arsenic | 250 ml | plastic | HNO ₃ HNO₃ ^{MA Preservative MA} Unpreserved |
| D. Arsenic | 250 ml | plastic | HNO ₃ |
| | | | |
| | | | |

ARCADIS Hydrasleeve Installation/Removal and Sample Form

Well ID: GWM-25

Project Number: KC001649.0001

HydraSleeve Size: 1L

Site: 2251 Armour Road Site

Weight Description: _____

Sleeve Installed By: Manu Afmani

Date Installed: 11/17/14

Weather: _____

Time Installed: ~1430

Casing Material: PVC

Water Level 21.38 btoc

Casing Diameter: 2 inch

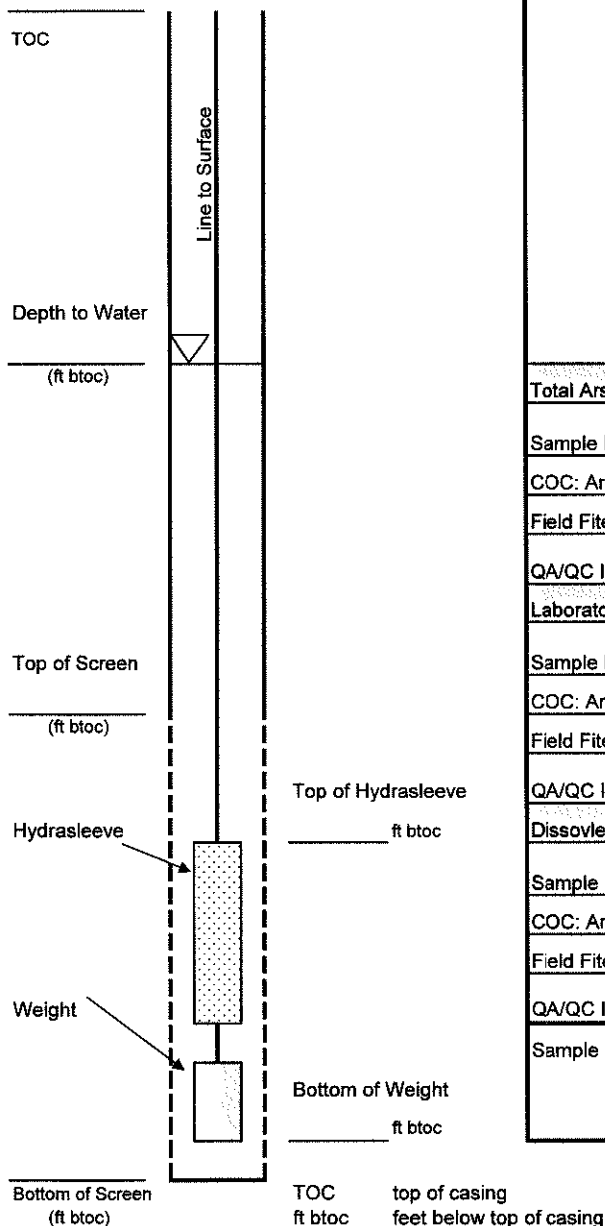
Gallons/Foot: _____

Total Depth (btoc): _____

Gallons in Well: _____

Well Casing Volumes
(Gallons/Foot)

| | | | | |
|--------------|-------------|-------------|-------------|-----------|
| 1" = 0.04 | 1.5" = 0.09 | 2.5" = 0.26 | 3.5" = 0.50 | 6" = 1.47 |
| 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | |



Groundwater Sample Collection Information

Sleeve Removal: _____ Date Removed: 12/22/14

Time Removed: 1330

Sleeve Removal Post Low Flow Sample Collection? Yes / No

Sample Identification:

Sample Personnel: Stephan Schmitz

Sample Date: 12/22/14

Total Arsenic - Preserved

| | |
|-------------------------------------|--------------------------|
| Sample ID: <u>GWM-25(20141222)</u> | Sample Time: <u>1330</u> |
| COC: Arsenic (6010C) | Preservative: HNO3 |
| Field Filtered & Type: Not Filtered | For Lab Filtration: No |
| QA/QC ID: _____ | Sample Time: _____ |

Laboratory Filtered Arsenic Sample - Not Preserved

| | |
|--|---------------------------------|
| Sample ID: <u>GWM-25(20141222)</u> | Sample Time: <u>1330</u> |
| COC: Arsenic (6010C) | Preservative: None |
| Field Filtered & Type: <u>Not</u> Filtered | For Lab Filtration: Yes 0.45 µm |
| QA/QC ID: _____ | Sample Time: _____ |

Dissovled Arsenic - Field Filtered and Preserved

| | |
|------------------------------------|------------------------|
| Sample ID: _____ | Sample Time: _____ |
| COC: Arsenic (6010C) | Preservative: HNO3 |
| Field Filtered & Type: Yes 0.45 µm | For Lab Filtration: No |
| QA/QC ID: _____ | Sample Time: _____ |

Sample Notes: _____

Well Information

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Condition of Well: Good

Well Completion: Flush Mount / Stick Up

Field Data Sheet
Water Level Measurements and Well Depth

Date: 11/11/14

Measured By: Manu Ajmani

Site: Armour Road Site

| Well Identification | Casing Elevation (MSL) | Depth to Groundwater | Total Depth | Comments |
|---------------------|------------------------|-------------------------|-------------|----------|
| GWM-01S | 739.82 | 19.00 | 27.99' | |
| GWM-02S | 739.81 | 19.46' | 32.55' | |
| GWM-02D | 739.94 | 19.49 | 52.80' | |
| GWM-02B | 739.65 | 19.29' | 99.49' | |
| GWM-03S | 742.13 | 19.21 21.12' | 32.09' | |
| GWM-03D | 742.01 | 21.64' | 52.04' | |
| GWM-03B | 742.10 | 21.73' | 98.20' | |
| GWM-04S | 733.82 | 13.78' | 30.92' | |
| GWM-04D | 733.88 | 13.72' | 51.1' | |
| GWM-05S | 735.60 | 15.49' | 28.20' | |
| GWM-05D | 735.85 | 15.73' | 50.37' | |
| GWM-06S | 737.80 | 18.74' | 29.21' | |
| GWM-08S | NA | 22.22' | 28.81' | |
| GWM-08D | 742.76 | 22.40' | 48.90' | |
| GWM-08B | 742.54 | 22.28' | 107.65 | |
| GWM-09S | 733.47 | 12.98 | 20.56 | |
| GWM-09D | 733.83 | 13.41 | 40.40' | |
| GWM-09B | 733.50 | 13.24 | 111.56 | |
| GWM-11S | 736.08 | 15.59' | 22.01' | |
| GWM-11D | 736.07 | 15.66' | 41.90' | |
| GWM-11B | 735.76 | 15.64' | 94.46' | |
| GWM-12S | 740.82 | 20.34' | 28.25' | |
| GWM-13S | 731.72 | 11.86' | 24.53 | |
| GWM-13D | 731.70 | 11.89' | 44.44' | |
| GWM-14B | 743.93 | 23.61' | 108.51' | |
| GWM-15B | 741.43 | 21.17' | 120.74' | |
| MW-11 | 740.51 | 19.96' | 37.07' | |

APPENDIX D

LAB DATA AND COC SHEETS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive

Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-66427-1

Client Project/Site: Rio Tinto

For:

ARCADIS U.S., Inc.

8725 Rosehill

Suite 350

Lenexa, Kansas 66215

Attn: Alex Walter



Authorized for release by:

12/11/2014 8:56:22 AM

Heather Wagner, Project Manager I

(615)301-5763

heather.wagner@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|-------------------|--------|----------------|----------------|
| 490-66427-1 | GWM-2D(20141112) | Water | 11/12/14 08:50 | 11/15/14 08:50 |
| 490-66427-2 | GWM-2S(20141112) | Water | 11/12/14 09:05 | 11/15/14 08:50 |
| 490-66427-3 | GWM-3B(20141112) | Water | 11/12/14 09:30 | 11/15/14 08:50 |
| 490-66427-4 | GWM-3D(20141112) | Water | 11/12/14 09:45 | 11/15/14 08:50 |
| 490-66427-5 | GWM-3S(20141112) | Water | 11/12/14 10:00 | 11/15/14 08:50 |
| 490-66427-6 | GWM-11B(20141112) | Water | 11/12/14 10:15 | 11/15/14 08:50 |
| 490-66427-7 | GWM-11D(20141112) | Water | 11/12/14 10:30 | 11/15/14 08:50 |
| 490-66427-8 | GWM-9D(20141112) | Water | 11/12/14 10:50 | 11/15/14 08:50 |
| 490-66427-9 | GWM-9B(20141112) | Water | 11/12/14 11:10 | 11/15/14 08:50 |
| 490-66427-10 | GWM-12(20141112) | Water | 11/12/14 11:45 | 11/15/14 08:50 |
| 490-66427-11 | GWM-6S(20141112) | Water | 11/12/14 12:20 | 11/15/14 08:50 |
| 490-66427-12 | GWM-13S(20141112) | Water | 11/12/14 13:00 | 11/15/14 08:50 |
| 490-66427-13 | GWM-13D(20141112) | Water | 11/12/14 13:15 | 11/15/14 08:50 |
| 490-66427-14 | GWM-5S(20141112) | Water | 11/12/14 14:00 | 11/15/14 08:50 |
| 490-66427-15 | GWM-5D(20141112) | Water | 11/12/14 14:15 | 11/15/14 08:50 |
| 490-66427-16 | GWM-4S(20141112) | Water | 11/12/14 14:30 | 11/15/14 08:50 |
| 490-66427-17 | GWM-4D(20141112) | Water | 11/12/14 14:45 | 11/15/14 08:50 |
| 490-66427-18 | GWM-1S(20141112) | Water | 11/12/14 15:45 | 11/15/14 08:50 |
| 490-66427-19 | GWM-14B(20141113) | Water | 11/13/14 10:30 | 11/15/14 08:50 |
| 490-66427-20 | GWM-15B(20141113) | Water | 11/13/14 11:10 | 11/15/14 08:50 |
| 490-66427-21 | FB-01(20141113) | Water | 11/12/14 15:45 | 11/15/14 08:50 |
| 490-66427-22 | GWM-8D(20141113) | Water | 11/13/14 13:30 | 11/15/14 08:50 |
| 490-66427-23 | FB-03(20141113) | Water | 11/13/14 14:00 | 11/15/14 08:50 |
| 490-66427-24 | GWM-2B(20141114) | Water | 11/14/14 16:30 | 11/15/14 08:50 |
| 490-66427-25 | Dup-01(20141114) | Water | 11/14/14 16:30 | 11/15/14 08:50 |
| 490-66427-26 | EB-01(20141114) | Water | 11/14/14 16:30 | 11/15/14 08:50 |

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Job ID: 490-66427-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-66427-1

Comments

No additional comments.

Receipt

The samples were received on 11/15/2014 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.4° C and 1.6° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Qualifiers

Metals

| Qualifier | Qualifier Description |
|-----------|---|
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| E | Result exceeded calibration range. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| □ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-2D(20141112)

Lab Sample ID: 490-66427-1

Date Collected: 11/12/14 08:50

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 7.33 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 14:47 | 12/06/14 07:03 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 8.48 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 07:45 | 12/04/14 22:48 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-2S(20141112)

Lab Sample ID: 490-66427-2

Date Collected: 11/12/14 09:05

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 4.01 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 14:47 | 12/06/14 07:07 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 3.87 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 07:45 | 12/04/14 22:52 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-3B(20141112)

Lab Sample ID: 490-66427-3

Date Collected: 11/12/14 09:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.221 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 14:47 | 12/06/14 07:11 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.213 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 07:45 | 12/04/14 22:56 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-3D(20141112)

Lab Sample ID: 490-66427-4

Date Collected: 11/12/14 09:45

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 8.73 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 14:47 | 12/06/14 07:16 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Arsenic | 11.4 | | 0.100 | 0.0720 | mg/L | | 11/26/14 07:45 | 12/06/14 15:04 | 10 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-3S(20141112)

Lab Sample ID: 490-66427-5

Date Collected: 11/12/14 10:00

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 3.85 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 03:11 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 3.72 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 07:45 | 12/04/14 23:15 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-11B(20141112)

Lab Sample ID: 490-66427-6

Date Collected: 11/12/14 10:15

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.162 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 03:43 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.184 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 14:45 | 12/06/14 03:25 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-11D(20141112)

Lab Sample ID: 490-66427-7

Date Collected: 11/12/14 10:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 4.04 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 03:47 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 4.09 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:04 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-9D(20141112)

Lab Sample ID: 490-66427-8

Date Collected: 11/12/14 10:50

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0514 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 03:51 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0520 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:09 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-9B(20141112)

Lab Sample ID: 490-66427-9

Date Collected: 11/12/14 11:10

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 1.84 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 03:55 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 1.87 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:13 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-12(20141112)

Lab Sample ID: 490-66427-10

Date Collected: 11/12/14 11:45

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0288 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 04:00 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0282 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:17 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-6S(20141112)

Lab Sample ID: 490-66427-11

Date Collected: 11/12/14 12:20

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0516 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 04:04 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:22 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-13S(20141112)

Lab Sample ID: 490-66427-12

Date Collected: 11/12/14 13:00

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 04:08 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:26 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-13D(20141112)

Lab Sample ID: 490-66427-13

Date Collected: 11/12/14 13:15

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0754 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 04:13 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0684 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:40 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-5S(20141112)

Lab Sample ID: 490-66427-14

Date Collected: 11/12/14 14:00

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0928 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 01:27 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0918 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:45 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-5D(20141112)

Lab Sample ID: 490-66427-15

Date Collected: 11/12/14 14:15

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0577 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 01:31 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0581 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:49 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-4S(20141112)

Lab Sample ID: 490-66427-16

Date Collected: 11/12/14 14:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0293 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 01:35 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0278 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:53 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-4D(20141112)

Lab Sample ID: 490-66427-17

Date Collected: 11/12/14 14:45

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0628 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 01:39 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0595 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 08:58 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-1S(20141112)

Lab Sample ID: 490-66427-18

Date Collected: 11/12/14 15:45

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0931 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 01:53 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.0167 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 09:02 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-14B(20141113)

Lab Sample ID: 490-66427-19

Date Collected: 11/13/14 10:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.884 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 01:57 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.588 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 09:07 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-15B(20141113)

Lab Sample ID: 490-66427-20

Date Collected: 11/13/14 11:10

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Arsenic | 9.96 | | 0.100 | 0.0720 | mg/L | | 12/03/14 07:42 | 12/06/14 17:09 | 10 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Arsenic | 11.0 | | 0.100 | 0.0720 | mg/L | | 12/02/14 11:19 | 12/09/14 19:23 | 10 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: FB-01(20141113)

Lab Sample ID: 490-66427-21

Date Collected: 11/12/14 15:45

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 02:06 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 09:15 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-8D(20141113)

Lab Sample ID: 490-66427-22

Date Collected: 11/13/14 13:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.166 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 02:10 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.185 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 09:20 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: FB-03(20141113)

Lab Sample ID: 490-66427-23

Date Collected: 11/13/14 14:00

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/06/14 17:13 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 09:34 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-2B(20141114)

Lab Sample ID: 490-66427-24

Date Collected: 11/14/14 16:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.121 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 01:06 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.156 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 07:52 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: Dup-01(20141114)

Lab Sample ID: 490-66427-25

Date Collected: 11/14/14 16:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.151 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 02:19 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | 0.151 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:52 | 12/06/14 15:17 | 1 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: EB-01(20141114)

Lab Sample ID: 490-66427-26

Date Collected: 11/14/14 16:30

Matrix: Water

Date Received: 11/15/14 08:50

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 02:23 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:52 | 12/06/14 15:21 | 1 |

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-209486/1-A
Matrix: Water
Analysis Batch: 211953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209486

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 14:47 | 12/06/14 05:08 | 1 |

Lab Sample ID: LCS 490-209486/2-A
Matrix: Water
Analysis Batch: 211953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209486

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.4826 | | mg/L | | 97 | 80 - 120 |

Lab Sample ID: LCSD 490-209486/3-A
Matrix: Water
Analysis Batch: 211953

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 209486

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | 0.500 | 0.4782 | | mg/L | | 96 | 80 - 120 | 1 | 20 |

Lab Sample ID: 490-66258-F-2-B MS
Matrix: Water
Analysis Batch: 211953

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 209486

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Arsenic | <0.0100 | | 0.500 | 0.4993 | | mg/L | | 100 | 75 - 125 |

Lab Sample ID: 490-66258-F-2-C MSD
Matrix: Water
Analysis Batch: 211953

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 209486

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | <0.0100 | | 0.500 | 0.4964 | | mg/L | | 99 | 75 - 125 | 1 | 20 |

Lab Sample ID: MB 490-210844/1-A
Matrix: Water
Analysis Batch: 211625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210844

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/05/14 00:47 | 1 |

Lab Sample ID: MB 490-210844/1-A
Matrix: Water
Analysis Batch: 212063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210844

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:42 | 12/06/14 17:02 | 1 |

Lab Sample ID: LCS 490-210844/2-A
Matrix: Water
Analysis Batch: 211625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210844

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.4812 | | mg/L | | 96 | 80 - 120 |

TestAmerica Nashville

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Lab Sample ID: LCS 490-210844/2-A

Matrix: Water

Analysis Batch: 212063

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 210844

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Arsenic | 0.500 | 0.4771 | | mg/L | | 95 | 80 - 120 |

Lab Sample ID: 490-66427-24 MS

Matrix: Water

Analysis Batch: 211625

Client Sample ID: GWM-2B(20141114)

Prep Type: Total/NA

Prep Batch: 210844

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Arsenic | 0.121 | | 0.500 | 0.6167 | | mg/L | | 99 | 75 - 125 |

Lab Sample ID: 490-66427-24 MSD

Matrix: Water

Analysis Batch: 211625

Client Sample ID: GWM-2B(20141114)

Prep Type: Total/NA

Prep Batch: 210844

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | 0.121 | | 0.500 | 0.6106 | | mg/L | | 98 | 75 - 125 | 1 | 20 |

Lab Sample ID: MB 490-210845/1-A

Matrix: Water

Analysis Batch: 211625

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 210845

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:46 | 12/05/14 02:58 | 1 |

Lab Sample ID: LCS 490-210845/2-A

Matrix: Water

Analysis Batch: 211625

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 210845

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Arsenic | 0.500 | 0.4867 | | mg/L | | 97 | 80 - 120 |

Lab Sample ID: LCSD 490-210845/3-A

Matrix: Water

Analysis Batch: 211625

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 210845

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Arsenic | 0.500 | 0.4805 | | mg/L | | 96 | 80 - 120 | 1 | 20 |

Lab Sample ID: 490-66427-5 MS

Matrix: Water

Analysis Batch: 211625

Client Sample ID: GWM-3S(20141112)

Prep Type: Total/NA

Prep Batch: 210845

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Arsenic | 3.85 | | 0.500 | 4.461 | 4 | mg/L | | 123 | 75 - 125 |

Lab Sample ID: 490-66427-5 MSD

Matrix: Water

Analysis Batch: 211625

Client Sample ID: GWM-3S(20141112)

Prep Type: Total/NA

Prep Batch: 210845

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | 3.85 | | 0.500 | 4.365 | 4 | mg/L | | 104 | 75 - 125 | 2 | 20 |

TestAmerica Nashville

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 490-209261/1-A

Matrix: Water

Analysis Batch: 211625

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 209261

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 07:45 | 12/04/14 21:04 | 1 |

Lab Sample ID: LCS 490-209261/2-A

Matrix: Water

Analysis Batch: 211625

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 209261

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.5242 | | mg/L | | 105 | 80 - 120 |

Lab Sample ID: MB 490-209485/1-A

Matrix: Water

Analysis Batch: 211903

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 209485

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 11/26/14 14:45 | 12/06/14 01:39 | 1 |

Lab Sample ID: LCS 490-209485/2-A

Matrix: Water

Analysis Batch: 211903

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 209485

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.5014 | | mg/L | | 100 | 80 - 120 |

Lab Sample ID: MB 490-210615/1-A

Matrix: Water

Analysis Batch: 211953

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 210615

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/02/14 11:19 | 12/06/14 07:33 | 1 |

Lab Sample ID: LCS 490-210615/2-A

Matrix: Water

Analysis Batch: 211953

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 210615

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.4736 | | mg/L | | 95 | 80 - 120 |

Lab Sample ID: MB 490-210848/1-A

Matrix: Water

Analysis Batch: 212063

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 210848

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:52 | 12/06/14 14:27 | 1 |

Lab Sample ID: LCS 490-210848/2-A

Matrix: Water

Analysis Batch: 212063

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 210848

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.5075 | | mg/L | | 102 | 80 - 120 |

TestAmerica Nashville

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Lab Sample ID: LCSD 490-210848/3-A

Matrix: Water

Analysis Batch: 212063

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 210848

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Arsenic | 0.500 | 0.5121 | | mg/L | | 102 | 80 - 120 | 1 | 20 |

Lab Sample ID: 490-66285-M-1-B MS

Matrix: Water

Analysis Batch: 211625

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 209261

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|-----|-----------|
| Arsenic | <0.0100 | | 0.500 | 0.5171 | | mg/L | | 103 | 75 - 125 | | |

Lab Sample ID: 490-66285-M-1-C MSD

Matrix: Water

Analysis Batch: 211625

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 209261

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | <0.0100 | | 0.500 | 0.5109 | | mg/L | | 102 | 75 - 125 | 1 | 20 |

Lab Sample ID: 490-66285-M-2-D MS

Matrix: Water

Analysis Batch: 211903

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 209485

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|-----|-----------|
| Arsenic | 0.0159 | | 0.500 | 0.5003 | | mg/L | | 97 | 75 - 125 | | |

Lab Sample ID: 490-66285-M-2-E MSD

Matrix: Water

Analysis Batch: 211903

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 209485

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | 0.0159 | | 0.500 | 0.5092 | | mg/L | | 99 | 75 - 125 | 2 | 20 |

Lab Sample ID: 490-66427-24 MS

Matrix: Water

Analysis Batch: 211953

Client Sample ID: GWM-2B(20141114)

Prep Type: Dissolved

Prep Batch: 210615

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|-----|-----------|
| Arsenic | 0.156 | | 0.500 | 0.6392 | | mg/L | | 97 | 75 - 125 | | |

Lab Sample ID: 490-66427-24 MSD

Matrix: Water

Analysis Batch: 211953

Client Sample ID: GWM-2B(20141114)

Prep Type: Dissolved

Prep Batch: 210615

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | 0.156 | | 0.500 | 0.6350 | | mg/L | | 96 | 75 - 125 | 1 | 20 |

Lab Sample ID: 490-66581-A-1-B MS

Matrix: Water

Analysis Batch: 212063

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 210848

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|-----|-----------|
| Arsenic | 23.5 | E | 0.500 | <0.0100 | 4 | mg/L | | 0 | 75 - 125 | | |

TestAmerica Nashville

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 490-66581-A-1-B MS ^20

Matrix: Water

Analysis Batch: 212757

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 210848

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Arsenic | | | 0.500 | 25.16 | | mg/L | | | |

Lab Sample ID: 490-66581-A-1-C MSD

Matrix: Water

Analysis Batch: 212063

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 210848

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | 23.5 | E | 0.500 | OVER | E 4 | ppm | | 0 | 75 - 125 | NC | 20 |

Lab Sample ID: 490-66581-A-1-C MSD ^20

Matrix: Water

Analysis Batch: 212757

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 210848

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | | | 0.500 | 24.06 | | mg/L | | | | | |
| Arsenic | | | 0.500 | 24.06 | | mg/L | | | | | |

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Metals

Prep Batch: 209261

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66285-M-1-B MS | Matrix Spike | Dissolved | Water | 3005A | |
| 490-66285-M-1-C MSD | Matrix Spike Duplicate | Dissolved | Water | 3005A | |
| 490-66427-1 | GWM-2D(20141112) | Dissolved | Water | 3005A | |
| 490-66427-2 | GWM-2S(20141112) | Dissolved | Water | 3005A | |
| 490-66427-3 | GWM-3B(20141112) | Dissolved | Water | 3005A | |
| 490-66427-4 | GWM-3D(20141112) | Dissolved | Water | 3005A | |
| 490-66427-5 | GWM-3S(20141112) | Dissolved | Water | 3005A | |
| LCS 490-209261/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| MB 490-209261/1-A | Method Blank | Total Recoverable | Water | 3005A | |

Prep Batch: 209485

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66285-M-2-D MS | Matrix Spike | Dissolved | Water | 3005A | |
| 490-66285-M-2-E MSD | Matrix Spike Duplicate | Dissolved | Water | 3005A | |
| 490-66427-6 | GWM-11B(20141112) | Dissolved | Water | 3005A | |
| LCS 490-209485/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| MB 490-209485/1-A | Method Blank | Total Recoverable | Water | 3005A | |

Prep Batch: 209486

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-66258-F-2-B MS | Matrix Spike | Total/NA | Water | 3010A | |
| 490-66258-F-2-C MSD | Matrix Spike Duplicate | Total/NA | Water | 3010A | |
| 490-66427-1 | GWM-2D(20141112) | Total/NA | Water | 3010A | |
| 490-66427-2 | GWM-2S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-3 | GWM-3B(20141112) | Total/NA | Water | 3010A | |
| 490-66427-4 | GWM-3D(20141112) | Total/NA | Water | 3010A | |
| LCS 490-209486/2-A | Lab Control Sample | Total/NA | Water | 3010A | |
| LCSD 490-209486/3-A | Lab Control Sample Dup | Total/NA | Water | 3010A | |
| MB 490-209486/1-A | Method Blank | Total/NA | Water | 3010A | |

Prep Batch: 210615

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|-------------------|-----------|--------|--------|------------|
| 490-66427-7 | GWM-11D(20141112) | Dissolved | Water | 3005A | |
| 490-66427-8 | GWM-9D(20141112) | Dissolved | Water | 3005A | |
| 490-66427-9 | GWM-9B(20141112) | Dissolved | Water | 3005A | |
| 490-66427-10 | GWM-12(20141112) | Dissolved | Water | 3005A | |
| 490-66427-11 | GWM-6S(20141112) | Dissolved | Water | 3005A | |
| 490-66427-12 | GWM-13S(20141112) | Dissolved | Water | 3005A | |
| 490-66427-13 | GWM-13D(20141112) | Dissolved | Water | 3005A | |
| 490-66427-14 | GWM-5S(20141112) | Dissolved | Water | 3005A | |
| 490-66427-15 | GWM-5D(20141112) | Dissolved | Water | 3005A | |
| 490-66427-16 | GWM-4S(20141112) | Dissolved | Water | 3005A | |
| 490-66427-17 | GWM-4D(20141112) | Dissolved | Water | 3005A | |
| 490-66427-18 | GWM-1S(20141112) | Dissolved | Water | 3005A | |
| 490-66427-19 | GWM-14B(20141113) | Dissolved | Water | 3005A | |
| 490-66427-20 | GWM-15B(20141113) | Dissolved | Water | 3005A | |
| 490-66427-21 | FB-01(20141113) | Dissolved | Water | 3005A | |
| 490-66427-22 | GWM-8D(20141113) | Dissolved | Water | 3005A | |
| 490-66427-23 | FB-03(20141113) | Dissolved | Water | 3005A | |
| 490-66427-24 | GWM-2B(20141114) | Dissolved | Water | 3005A | |
| 490-66427-24 MS | GWM-2B(20141114) | Dissolved | Water | 3005A | |

TestAmerica Nashville

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Metals (Continued)

Prep Batch: 210615 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 490-66427-24 MSD | GWM-2B(20141114) | Dissolved | Water | 3005A | |
| LCS 490-210615/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| MB 490-210615/1-A | Method Blank | Total Recoverable | Water | 3005A | |

Prep Batch: 210844

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 490-66427-14 | GWM-5S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-15 | GWM-5D(20141112) | Total/NA | Water | 3010A | |
| 490-66427-16 | GWM-4S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-17 | GWM-4D(20141112) | Total/NA | Water | 3010A | |
| 490-66427-18 | GWM-1S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-19 | GWM-14B(20141113) | Total/NA | Water | 3010A | |
| 490-66427-20 | GWM-15B(20141113) | Total/NA | Water | 3010A | |
| 490-66427-21 | FB-01(20141113) | Total/NA | Water | 3010A | |
| 490-66427-22 | GWM-8D(20141113) | Total/NA | Water | 3010A | |
| 490-66427-23 | FB-03(20141113) | Total/NA | Water | 3010A | |
| 490-66427-24 | GWM-2B(20141114) | Total/NA | Water | 3010A | |
| 490-66427-24 MS | GWM-2B(20141114) | Total/NA | Water | 3010A | |
| 490-66427-24 MSD | GWM-2B(20141114) | Total/NA | Water | 3010A | |
| 490-66427-25 | Dup-01(20141114) | Total/NA | Water | 3010A | |
| 490-66427-26 | EB-01(20141114) | Total/NA | Water | 3010A | |
| LCS 490-210844/2-A | Lab Control Sample | Total/NA | Water | 3010A | |
| MB 490-210844/1-A | Method Blank | Total/NA | Water | 3010A | |

Prep Batch: 210845

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-66427-5 | GWM-3S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-5 MS | GWM-3S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-5 MSD | GWM-3S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-6 | GWM-11B(20141112) | Total/NA | Water | 3010A | |
| 490-66427-7 | GWM-11D(20141112) | Total/NA | Water | 3010A | |
| 490-66427-8 | GWM-9D(20141112) | Total/NA | Water | 3010A | |
| 490-66427-9 | GWM-9B(20141112) | Total/NA | Water | 3010A | |
| 490-66427-10 | GWM-12(20141112) | Total/NA | Water | 3010A | |
| 490-66427-11 | GWM-6S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-12 | GWM-13S(20141112) | Total/NA | Water | 3010A | |
| 490-66427-13 | GWM-13D(20141112) | Total/NA | Water | 3010A | |
| LCS 490-210845/2-A | Lab Control Sample | Total/NA | Water | 3010A | |
| LCSD 490-210845/3-A | Lab Control Sample Dup | Total/NA | Water | 3010A | |
| MB 490-210845/1-A | Method Blank | Total/NA | Water | 3010A | |

Prep Batch: 210848

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------------|------------------------|-------------------|--------|--------|------------|
| 490-66427-25 | Dup-01(20141114) | Dissolved | Water | 3005A | |
| 490-66427-26 | EB-01(20141114) | Dissolved | Water | 3005A | |
| 490-66581-A-1-B MS | Matrix Spike | Dissolved | Water | 3005A | |
| 490-66581-A-1-B MS ^20 | Matrix Spike | Dissolved | Water | 3005A | |
| 490-66581-A-1-C MSD | Matrix Spike Duplicate | Dissolved | Water | 3005A | |
| 490-66581-A-1-C MSD ^20 | Matrix Spike Duplicate | Dissolved | Water | 3005A | |
| LCS 490-210848/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| LCSD 490-210848/3-A | Lab Control Sample Dup | Total Recoverable | Water | 3005A | |

TestAmerica Nashville

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Metals (Continued)

Prep Batch: 210848 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-------------------|--------|--------|------------|
| MB 490-210848/1-A | Method Blank | Total Recoverable | Water | 3005A | |

Analysis Batch: 211625

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66285-M-1-B MS | Matrix Spike | Dissolved | Water | 6010C | 209261 |
| 490-66285-M-1-C MSD | Matrix Spike Duplicate | Dissolved | Water | 6010C | 209261 |
| 490-66427-1 | GWM-2D(20141112) | Dissolved | Water | 6010C | 209261 |
| 490-66427-2 | GWM-2S(20141112) | Dissolved | Water | 6010C | 209261 |
| 490-66427-3 | GWM-3B(20141112) | Dissolved | Water | 6010C | 209261 |
| 490-66427-5 | GWM-3S(20141112) | Dissolved | Water | 6010C | 209261 |
| 490-66427-5 | GWM-3S(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-5 MS | GWM-3S(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-5 MSD | GWM-3S(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-6 | GWM-11B(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-7 | GWM-11D(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-8 | GWM-9D(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-9 | GWM-9B(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-10 | GWM-12(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-11 | GWM-6S(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-12 | GWM-13S(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-13 | GWM-13D(20141112) | Total/NA | Water | 6010C | 210845 |
| 490-66427-14 | GWM-5S(20141112) | Total/NA | Water | 6010C | 210844 |
| 490-66427-15 | GWM-5D(20141112) | Total/NA | Water | 6010C | 210844 |
| 490-66427-16 | GWM-4S(20141112) | Total/NA | Water | 6010C | 210844 |
| 490-66427-17 | GWM-4D(20141112) | Total/NA | Water | 6010C | 210844 |
| 490-66427-18 | GWM-1S(20141112) | Total/NA | Water | 6010C | 210844 |
| 490-66427-19 | GWM-14B(20141113) | Total/NA | Water | 6010C | 210844 |
| 490-66427-21 | FB-01(20141113) | Total/NA | Water | 6010C | 210844 |
| 490-66427-22 | GWM-8D(20141113) | Total/NA | Water | 6010C | 210844 |
| 490-66427-24 | GWM-2B(20141114) | Total/NA | Water | 6010C | 210844 |
| 490-66427-24 MS | GWM-2B(20141114) | Total/NA | Water | 6010C | 210844 |
| 490-66427-24 MSD | GWM-2B(20141114) | Total/NA | Water | 6010C | 210844 |
| 490-66427-25 | Dup-01(20141114) | Total/NA | Water | 6010C | 210844 |
| 490-66427-26 | EB-01(20141114) | Total/NA | Water | 6010C | 210844 |
| LCS 490-209261/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 209261 |
| LCS 490-210844/2-A | Lab Control Sample | Total/NA | Water | 6010C | 210844 |
| LCS 490-210845/2-A | Lab Control Sample | Total/NA | Water | 6010C | 210845 |
| LCSD 490-210845/3-A | Lab Control Sample Dup | Total/NA | Water | 6010C | 210845 |
| MB 490-209261/1-A | Method Blank | Total Recoverable | Water | 6010C | 209261 |
| MB 490-210844/1-A | Method Blank | Total/NA | Water | 6010C | 210844 |
| MB 490-210845/1-A | Method Blank | Total/NA | Water | 6010C | 210845 |

Analysis Batch: 211903

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66285-M-2-D MS | Matrix Spike | Dissolved | Water | 6010C | 209485 |
| 490-66285-M-2-E MSD | Matrix Spike Duplicate | Dissolved | Water | 6010C | 209485 |
| 490-66427-6 | GWM-11B(20141112) | Dissolved | Water | 6010C | 209485 |
| LCS 490-209485/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 209485 |
| MB 490-209485/1-A | Method Blank | Total Recoverable | Water | 6010C | 209485 |

TestAmerica Nashville

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Metals (Continued)

Analysis Batch: 211953

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66258-F-2-B MS | Matrix Spike | Total/NA | Water | 6010C | 209486 |
| 490-66258-F-2-C MSD | Matrix Spike Duplicate | Total/NA | Water | 6010C | 209486 |
| 490-66427-1 | GWM-2D(20141112) | Total/NA | Water | 6010C | 209486 |
| 490-66427-2 | GWM-2S(20141112) | Total/NA | Water | 6010C | 209486 |
| 490-66427-3 | GWM-3B(20141112) | Total/NA | Water | 6010C | 209486 |
| 490-66427-4 | GWM-3D(20141112) | Total/NA | Water | 6010C | 209486 |
| 490-66427-7 | GWM-11D(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-8 | GWM-9D(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-9 | GWM-9B(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-10 | GWM-12(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-11 | GWM-6S(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-12 | GWM-13S(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-13 | GWM-13D(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-14 | GWM-5S(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-15 | GWM-5D(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-16 | GWM-4S(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-17 | GWM-4D(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-18 | GWM-1S(20141112) | Dissolved | Water | 6010C | 210615 |
| 490-66427-19 | GWM-14B(20141113) | Dissolved | Water | 6010C | 210615 |
| 490-66427-21 | FB-01(20141113) | Dissolved | Water | 6010C | 210615 |
| 490-66427-22 | GWM-8D(20141113) | Dissolved | Water | 6010C | 210615 |
| 490-66427-23 | FB-03(20141113) | Dissolved | Water | 6010C | 210615 |
| 490-66427-24 | GWM-2B(20141114) | Dissolved | Water | 6010C | 210615 |
| 490-66427-24 MS | GWM-2B(20141114) | Dissolved | Water | 6010C | 210615 |
| 490-66427-24 MSD | GWM-2B(20141114) | Dissolved | Water | 6010C | 210615 |
| LCS 490-209486/2-A | Lab Control Sample | Total/NA | Water | 6010C | 209486 |
| LCS 490-210615/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 210615 |
| LCSD 490-209486/3-A | Lab Control Sample Dup | Total/NA | Water | 6010C | 209486 |
| MB 490-209486/1-A | Method Blank | Total/NA | Water | 6010C | 209486 |
| MB 490-210615/1-A | Method Blank | Total Recoverable | Water | 6010C | 210615 |

Analysis Batch: 212063

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66427-20 | GWM-15B(20141113) | Total/NA | Water | 6010C | 210844 |
| 490-66427-23 | FB-03(20141113) | Total/NA | Water | 6010C | 210844 |
| 490-66427-25 | Dup-01(20141114) | Dissolved | Water | 6010C | 210848 |
| 490-66427-26 | EB-01(20141114) | Dissolved | Water | 6010C | 210848 |
| 490-66581-A-1-B MS | Matrix Spike | Dissolved | Water | 6010C | 210848 |
| 490-66581-A-1-C MSD | Matrix Spike Duplicate | Dissolved | Water | 6010C | 210848 |
| LCS 490-210844/2-A | Lab Control Sample | Total/NA | Water | 6010C | 210844 |
| LCS 490-210848/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 210848 |
| LCSD 490-210848/3-A | Lab Control Sample Dup | Total Recoverable | Water | 6010C | 210848 |
| MB 490-210844/1-A | Method Blank | Total/NA | Water | 6010C | 210844 |
| MB 490-210848/1-A | Method Blank | Total Recoverable | Water | 6010C | 210848 |

Analysis Batch: 212066

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 490-66427-4 | GWM-3D(20141112) | Dissolved | Water | 6010C | 209261 |

TestAmerica Nashville

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Metals (Continued)

Analysis Batch: 212749

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|-------------------|-----------|--------|--------|------------|
| 490-66427-20 | GWM-15B(20141113) | Dissolved | Water | 6010C | 210615 |

Analysis Batch: 212757

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------------|------------------------|-----------|--------|--------|------------|
| 490-66581-A-1-B MS ^20 | Matrix Spike | Dissolved | Water | 6010C | 210848 |
| 490-66581-A-1-C MSD ^20 | Matrix Spike Duplicate | Dissolved | Water | 6010C | 210848 |

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-2D(20141112)

Date Collected: 11/12/14 08:50

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-1

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 209261 | 11/26/14 07:45 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/04/14 22:48 | LEG | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 209486 | 11/26/14 14:47 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 07:03 | CME | TAL NSH |

Client Sample ID: GWM-2S(20141112)

Date Collected: 11/12/14 09:05

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-2

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 209261 | 11/26/14 07:45 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/04/14 22:52 | LEG | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 209486 | 11/26/14 14:47 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 07:07 | CME | TAL NSH |

Client Sample ID: GWM-3B(20141112)

Date Collected: 11/12/14 09:30

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-3

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 209261 | 11/26/14 07:45 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/04/14 22:56 | LEG | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 209486 | 11/26/14 14:47 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 07:11 | CME | TAL NSH |

Client Sample ID: GWM-3D(20141112)

Date Collected: 11/12/14 09:45

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-4

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 209261 | 11/26/14 07:45 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 10 | 50 mL | 50 mL | 212066 | 12/06/14 15:04 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 209486 | 11/26/14 14:47 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 07:16 | CME | TAL NSH |

Client Sample ID: GWM-3S(20141112)

Date Collected: 11/12/14 10:00

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-5

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 209261 | 11/26/14 07:45 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/04/14 23:15 | LEG | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |

TestAmerica Nashville

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-3S(20141112)

Date Collected: 11/12/14 10:00

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-5

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 03:11 | LEG | TAL NSH |

Client Sample ID: GWM-11B(20141112)

Date Collected: 11/12/14 10:15

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-6

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 209485 | 11/26/14 14:45 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211903 | 12/06/14 03:25 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 03:43 | LEG | TAL NSH |

Client Sample ID: GWM-11D(20141112)

Date Collected: 11/12/14 10:30

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-7

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:04 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 03:47 | LEG | TAL NSH |

Client Sample ID: GWM-9D(20141112)

Date Collected: 11/12/14 10:50

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-8

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:09 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 03:51 | LEG | TAL NSH |

Client Sample ID: GWM-9B(20141112)

Date Collected: 11/12/14 11:10

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-9

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:13 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 03:55 | LEG | TAL NSH |

TestAmerica Nashville

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-12(20141112)

Lab Sample ID: 490-66427-10

Date Collected: 11/12/14 11:45

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:17 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 04:00 | LEG | TAL NSH |

Client Sample ID: GWM-6S(20141112)

Lab Sample ID: 490-66427-11

Date Collected: 11/12/14 12:20

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:22 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 04:04 | LEG | TAL NSH |

Client Sample ID: GWM-13S(20141112)

Lab Sample ID: 490-66427-12

Date Collected: 11/12/14 13:00

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:26 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 04:08 | LEG | TAL NSH |

Client Sample ID: GWM-13D(20141112)

Lab Sample ID: 490-66427-13

Date Collected: 11/12/14 13:15

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:40 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210845 | 12/03/14 07:46 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 04:13 | LEG | TAL NSH |

Client Sample ID: GWM-5S(20141112)

Lab Sample ID: 490-66427-14

Date Collected: 11/12/14 14:00

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:45 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |

TestAmerica Nashville

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-5S(20141112)

Date Collected: 11/12/14 14:00

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-14

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 01:27 | LEG | TAL NSH |

Client Sample ID: GWM-5D(20141112)

Date Collected: 11/12/14 14:15

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-15

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:49 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 01:31 | LEG | TAL NSH |

Client Sample ID: GWM-4S(20141112)

Date Collected: 11/12/14 14:30

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-16

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:53 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 01:35 | LEG | TAL NSH |

Client Sample ID: GWM-4D(20141112)

Date Collected: 11/12/14 14:45

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-17

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 08:58 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 01:39 | LEG | TAL NSH |

Client Sample ID: GWM-1S(20141112)

Date Collected: 11/12/14 15:45

Date Received: 11/15/14 08:50

Lab Sample ID: 490-66427-18

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 09:02 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 01:53 | LEG | TAL NSH |

TestAmerica Nashville

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: GWM-14B(20141113)

Lab Sample ID: 490-66427-19

Date Collected: 11/13/14 10:30

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 09:07 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 01:57 | LEG | TAL NSH |

Client Sample ID: GWM-15B(20141113)

Lab Sample ID: 490-66427-20

Date Collected: 11/13/14 11:10

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 10 | 50 mL | 50 mL | 212749 | 12/09/14 19:23 | LEG | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 10 | 50 mL | 50 mL | 212063 | 12/06/14 17:09 | CME | TAL NSH |

Client Sample ID: FB-01(20141113)

Lab Sample ID: 490-66427-21

Date Collected: 11/12/14 15:45

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 09:15 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 02:06 | LEG | TAL NSH |

Client Sample ID: GWM-8D(20141113)

Lab Sample ID: 490-66427-22

Date Collected: 11/13/14 13:30

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 09:20 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 02:10 | LEG | TAL NSH |

Client Sample ID: FB-03(20141113)

Lab Sample ID: 490-66427-23

Date Collected: 11/13/14 14:00

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 09:34 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |

TestAmerica Nashville

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Client Sample ID: FB-03(20141113)

Lab Sample ID: 490-66427-23

Date Collected: 11/13/14 14:00

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 212063 | 12/06/14 17:13 | CME | TAL NSH |

Client Sample ID: GWM-2B(20141114)

Lab Sample ID: 490-66427-24

Date Collected: 11/14/14 16:30

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210615 | 12/02/14 11:19 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211953 | 12/06/14 07:52 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 01:06 | LEG | TAL NSH |

Client Sample ID: Dup-01(20141114)

Lab Sample ID: 490-66427-25

Date Collected: 11/14/14 16:30

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210848 | 12/03/14 07:52 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 212063 | 12/06/14 15:17 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 02:19 | LEG | TAL NSH |

Client Sample ID: EB-01(20141114)

Lab Sample ID: 490-66427-26

Date Collected: 11/14/14 16:30

Matrix: Water

Date Received: 11/15/14 08:50

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210848 | 12/03/14 07:52 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 212063 | 12/06/14 15:21 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 210844 | 12/03/14 07:42 | NJB | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211625 | 12/05/14 02:23 | LEG | TAL NSH |

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TestAmerica Nashville

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

| Method | Method Description | Protocol | Laboratory |
|--------|--------------------|----------|------------|
| 6010C | Metals (ICP) | SW846 | TAL NSH |

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66427-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|------------------------|---------------|------------|------------------|-----------------|
| A2LA | A2LA | | NA: NELAP & A2LA | 12-31-15 |
| A2LA | ISO/IEC 17025 | | 0453.07 | 12-31-15 |
| Alaska (UST) | State Program | 10 | UST-087 | 10-31-15 |
| Arizona | State Program | 9 | AZ0473 | 05-05-15 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-15 |
| California | NELAP | 9 | 1168CA | 10-31-14 * |
| Connecticut | State Program | 1 | PH-0220 | 12-31-15 |
| Florida | NELAP | 4 | E87358 | 06-30-15 |
| Illinois | NELAP | 5 | 200010 | 12-09-15 |
| Iowa | State Program | 7 | 131 | 04-01-16 |
| Kansas | NELAP | 7 | E-10229 | 01-31-15 |
| Kentucky (UST) | State Program | 4 | 19 | 06-30-15 |
| Kentucky (WW) | State Program | 4 | 90038 | 12-31-14 * |
| Louisiana | NELAP | 6 | 30613 | 06-30-15 |
| Maryland | State Program | 3 | 316 | 03-31-15 |
| Massachusetts | State Program | 1 | M-TN032 | 06-30-15 |
| Minnesota | NELAP | 5 | 047-999-345 | 12-31-14 * |
| Mississippi | State Program | 4 | N/A | 06-30-15 |
| Montana (UST) | State Program | 8 | NA | 02-24-20 |
| Nevada | State Program | 9 | TN00032 | 07-31-15 |
| New Hampshire | NELAP | 1 | 2963 | 10-09-15 |
| New Jersey | NELAP | 2 | TN965 | 06-30-15 |
| New York | NELAP | 2 | 11342 | 03-31-15 |
| North Carolina (WW/SW) | State Program | 4 | 387 | 12-31-14 * |
| North Dakota | State Program | 8 | R-146 | 06-30-15 |
| Ohio VAP | State Program | 5 | CL0033 | 10-16-15 |
| Oklahoma | State Program | 6 | 9412 | 08-31-15 |
| Oregon | NELAP | 10 | TN200001 | 04-29-15 |
| Pennsylvania | NELAP | 3 | 68-00585 | 06-30-15 |
| Rhode Island | State Program | 1 | LAO00268 | 12-30-14 * |
| South Carolina | State Program | 4 | 84009 (001) | 02-28-15 |
| South Carolina (DW) | State Program | 4 | 84009 (002) | 02-23-17 |
| Tennessee | State Program | 4 | 2008 | 02-23-17 |
| Texas | NELAP | 6 | T104704077 | 08-31-15 |
| USDA | Federal | | S-48469 | 10-30-16 |
| Utah | NELAP | 8 | TN00032 | 07-31-15 |
| Virginia | NELAP | 3 | 460152 | 06-14-15 |
| Washington | State Program | 10 | C789 | 07-19-15 |
| West Virginia DEP | State Program | 3 | 219 | 02-28-15 |
| Wisconsin | State Program | 5 | 998020430 | 08-31-15 |
| Wyoming (UST) | A2LA | 8 | 453.07 | 12-31-15 |

* Certification renewal pending - certification considered valid.

TestAmerica Nashville

COOLER RECEIPT FORM



Cooler Received/Opened On 11/15/2014@ 0850

1. Tracking # 2722 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) LF

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) LF

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) LF

I certify that I attached a label with the unique LIMS number to each container (initial) LF

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# 1

COOLER RECEIPT FORM

Cooler Received/Opened On : 11/15/2014 @ 0850

1. Tracking # 0427 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 18290455

2. Temperature of rep. sample or temp blank when opened: 0.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO # 1

Chain of Custody Record

TAL-4124 (1007)

Client **ARCADIS** Project Manager **Alex Walter** Date **11/14/14** Chain of Custody Number **282301**

Address **8925 Roselind Rd. #350** Telephone Number (Area Code)/Fax Number **(617) 492-0900** Lab Number **3** of **3**

City **Lexington** State **KS** Zip Code **66215** Site Contact **Mona Ajmani** Lab Contact

Project Name and Location (State) **High Tinto, Armour Rd. KCato** Carrier/Waybill Number

Contract/Purchase Order/Quote No. **KCCO 1649.0001**

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Air | Aqueous | Sed. | Soil | Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/ NaOH | TOC | Diss. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | </ |
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|---|------|------|-----|---------|------|------|---------|-------|------|-----|------|---------------|-----|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other **STD** QC Requirements (Specify) **Dissolved Arsenic is field filtered**

1. Relinquished By **Mona Ajmani** Date **11-14-14** Time **1800** 1. Received By **W. KIAN** Date **11/15/14** Time **0850**

2. Relinquished By Date Time 2. Received By Date Time

3. Relinquished By Date Time 3. Received By Date Time

Comments

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66427-1

Login Number: 66427

List Source: TestAmerica Nashville

List Number: 1

Creator: Gambill, Shane

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is \leq background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 1.6/0.4 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177


TestAmerica Job ID: 490-66581-1

Client Project/Site: Rio Tinto

For:

ARCADIS U.S., Inc.
8725 Rosehill
Suite 350
Lenexa, Kansas 66215

Attn: Alex Walter



Authorized for release by:

12/18/2014 4:47:30 PM

Jennifer Huckaba, Project Manager II
(615)301-5042

jennifer.huckaba@testamericainc.com

Designee for

Heather Wagner, Project Manager I
(615)301-5763

heather.wagner@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|-------------------|--------|----------------|----------------|
| 490-66581-1 | GWM-8B (20141117) | Water | 11/17/14 17:00 | 11/18/14 09:00 |
| 490-66581-2 | DUP-02 (20141117) | Water | 11/17/14 17:00 | 11/18/14 09:00 |
| 490-66581-3 | EB-02 (20141117) | Water | 11/17/14 17:08 | 11/18/14 09:00 |

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Job ID: 490-66581-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-66581-1

Comments

No additional comments.

Receipt

The samples were received on 11/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.2° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Qualifiers

Metals

| Qualifier | Qualifier Description |
|-----------|---|
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Client Sample ID: GWM-8B (20141117)

Lab Sample ID: 490-66581-1

Date Collected: 11/17/14 17:00

Matrix: Water

Date Received: 11/18/14 09:00

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Arsenic | 22.8 | | 0.200 | 0.144 | mg/L | | 12/04/14 08:41 | 12/06/14 17:30 | 20 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Arsenic | 25.4 | | 0.200 | 0.144 | mg/L | | 12/03/14 07:52 | 12/10/14 03:29 | 20 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Client Sample ID: DUP-02 (20141117)

Lab Sample ID: 490-66581-2

Date Collected: 11/17/14 17:00

Matrix: Water

Date Received: 11/18/14 09:00

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Arsenic | 24.8 | | 0.200 | 0.144 | mg/L | | 12/04/14 08:41 | 12/06/14 18:06 | 20 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Arsenic | 21.0 | | 0.100 | 0.0720 | mg/L | | 12/03/14 07:52 | 12/17/14 19:39 | 10 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Client Sample ID: EB-02 (20141117)

Lab Sample ID: 490-66581-3

Date Collected: 11/17/14 17:08

Matrix: Water

Date Received: 11/18/14 09:00

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/04/14 08:41 | 12/05/14 13:47 | 1 |

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:52 | 12/06/14 15:36 | 1 |

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-211174/1-A
Matrix: Water
Analysis Batch: 211893

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/04/14 08:41 | 12/05/14 12:41 | 1 |

Lab Sample ID: MB 490-211174/1-A
Matrix: Water
Analysis Batch: 212063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/04/14 08:41 | 12/06/14 17:20 | 1 |

Lab Sample ID: LCS 490-211174/2-A
Matrix: Water
Analysis Batch: 211893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.4977 | | mg/L | | 100 | 80 - 120 |

Lab Sample ID: LCS 490-211174/2-A
Matrix: Water
Analysis Batch: 212063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.4854 | | mg/L | | 97 | 80 - 120 |

Lab Sample ID: LCSD 490-211174/3-A
Matrix: Water
Analysis Batch: 211893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | 0.500 | 0.5085 | | mg/L | | 102 | 80 - 120 | 2 | 20 |

Lab Sample ID: LCSD 490-211174/3-A
Matrix: Water
Analysis Batch: 212063

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | 0.500 | 0.4916 | | mg/L | | 98 | 80 - 120 | 1 | 20 |

Lab Sample ID: 490-66581-1MS
Matrix: Water
Analysis Batch: 212063

Client Sample ID: GWM-8B (20141117)
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Arsenic | 22.8 | | 0.500 | 23.82 | 4 | mg/L | | 204 | 75 - 125 |

Lab Sample ID: 490-66581-1MSD
Matrix: Water
Analysis Batch: 212063

Client Sample ID: GWM-8B (20141117)
Prep Type: Total/NA
Prep Batch: 211174

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | 22.8 | | 0.500 | 23.58 | 4 | mg/L | | 156 | 75 - 125 | 1 | 20 |

TestAmerica Nashville

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Lab Sample ID: MB 490-210848/1-A
Matrix: Water
Analysis Batch: 212063

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 210848

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 12/03/14 07:52 | 12/06/14 14:27 | 1 |

Lab Sample ID: LCS 490-210848/2-A
Matrix: Water
Analysis Batch: 212063

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 210848

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.500 | 0.5075 | | mg/L | | 102 | 80 - 120 |

Lab Sample ID: LCSD 490-210848/3-A
Matrix: Water
Analysis Batch: 212063

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 210848

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | 0.500 | 0.5121 | | mg/L | | 102 | 80 - 120 | 1 | 20 |

Lab Sample ID: 490-66581-1MS
Matrix: Water
Analysis Batch: 212063

Client Sample ID: GWM-8B (20141117)
Prep Type: Dissolved
Prep Batch: 210848

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Arsenic | | | 0.500 | <0.0100 | | mg/L | | | |

Lab Sample ID: 490-66581-1MSD
Matrix: Water
Analysis Batch: 212063

Client Sample ID: GWM-8B (20141117)
Prep Type: Dissolved
Prep Batch: 210848

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | | | 0.500 | <0.0100 | | mg/L | | | | | |

TestAmerica Nashville

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Metals

Prep Batch: 210848

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66581-1 | GWM-8B (20141117) | Dissolved | Water | 3005A | |
| 490-66581-1MS | GWM-8B (20141117) | Dissolved | Water | 3005A | |
| 490-66581-1MSD | GWM-8B (20141117) | Dissolved | Water | 3005A | |
| 490-66581-2 | DUP-02 (20141117) | Dissolved | Water | 3005A | |
| 490-66581-3 | EB-02 (20141117) | Dissolved | Water | 3005A | |
| LCS 490-210848/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| LCSD 490-210848/3-A | Lab Control Sample Dup | Total Recoverable | Water | 3005A | |
| MB 490-210848/1-A | Method Blank | Total Recoverable | Water | 3005A | |

Prep Batch: 211174

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-66581-1 | GWM-8B (20141117) | Total/NA | Water | 3010A | |
| 490-66581-1MS | GWM-8B (20141117) | Total/NA | Water | 3010A | |
| 490-66581-1MSD | GWM-8B (20141117) | Total/NA | Water | 3010A | |
| 490-66581-2 | DUP-02 (20141117) | Total/NA | Water | 3010A | |
| 490-66581-3 | EB-02 (20141117) | Total/NA | Water | 3010A | |
| LCS 490-211174/2-A | Lab Control Sample | Total/NA | Water | 3010A | |
| LCSD 490-211174/3-A | Lab Control Sample Dup | Total/NA | Water | 3010A | |
| MB 490-211174/1-A | Method Blank | Total/NA | Water | 3010A | |

Analysis Batch: 211893

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-66581-3 | EB-02 (20141117) | Total/NA | Water | 6010C | 211174 |
| LCS 490-211174/2-A | Lab Control Sample | Total/NA | Water | 6010C | 211174 |
| LCSD 490-211174/3-A | Lab Control Sample Dup | Total/NA | Water | 6010C | 211174 |
| MB 490-211174/1-A | Method Blank | Total/NA | Water | 6010C | 211174 |

Analysis Batch: 212063

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-66581-1 | GWM-8B (20141117) | Total/NA | Water | 6010C | 211174 |
| 490-66581-1MS | GWM-8B (20141117) | Dissolved | Water | 6010C | 210848 |
| 490-66581-1MS | GWM-8B (20141117) | Total/NA | Water | 6010C | 211174 |
| 490-66581-1MSD | GWM-8B (20141117) | Dissolved | Water | 6010C | 210848 |
| 490-66581-1MSD | GWM-8B (20141117) | Total/NA | Water | 6010C | 211174 |
| 490-66581-2 | DUP-02 (20141117) | Total/NA | Water | 6010C | 211174 |
| 490-66581-3 | EB-02 (20141117) | Dissolved | Water | 6010C | 210848 |
| LCS 490-210848/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 210848 |
| LCS 490-211174/2-A | Lab Control Sample | Total/NA | Water | 6010C | 211174 |
| LCSD 490-210848/3-A | Lab Control Sample Dup | Total Recoverable | Water | 6010C | 210848 |
| LCSD 490-211174/3-A | Lab Control Sample Dup | Total/NA | Water | 6010C | 211174 |
| MB 490-210848/1-A | Method Blank | Total Recoverable | Water | 6010C | 210848 |
| MB 490-211174/1-A | Method Blank | Total/NA | Water | 6010C | 211174 |

Analysis Batch: 212757

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|-------------------|-----------|--------|--------|------------|
| 490-66581-1 | GWM-8B (20141117) | Dissolved | Water | 6010C | 210848 |

Analysis Batch: 214961

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|-------------------|-----------|--------|--------|------------|
| 490-66581-2 | DUP-02 (20141117) | Dissolved | Water | 6010C | 210848 |

TestAmerica Nashville

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Client Sample ID: GWM-8B (20141117)

Date Collected: 11/17/14 17:00

Date Received: 11/18/14 09:00

Lab Sample ID: 490-66581-1

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210848 | 12/03/14 07:52 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 20 | 50 mL | 50 mL | 212757 | 12/10/14 03:29 | LEG | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 211174 | 12/04/14 08:41 | AJD | TAL NSH |
| Total/NA | Analysis | 6010C | | 20 | 50 mL | 50 mL | 212063 | 12/06/14 17:30 | CME | TAL NSH |

Client Sample ID: DUP-02 (20141117)

Date Collected: 11/17/14 17:00

Date Received: 11/18/14 09:00

Lab Sample ID: 490-66581-2

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210848 | 12/03/14 07:52 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 10 | 50 mL | 50 mL | 214961 | 12/17/14 19:39 | ADN | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 211174 | 12/04/14 08:41 | AJD | TAL NSH |
| Total/NA | Analysis | 6010C | | 20 | 50 mL | 50 mL | 212063 | 12/06/14 18:06 | CME | TAL NSH |

Client Sample ID: EB-02 (20141117)

Date Collected: 11/17/14 17:08

Date Received: 11/18/14 09:00

Lab Sample ID: 490-66581-3

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 210848 | 12/03/14 07:52 | NJB | TAL NSH |
| Dissolved | Analysis | 6010C | | 1 | 50 mL | 50 mL | 212063 | 12/06/14 15:36 | CME | TAL NSH |
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 211174 | 12/04/14 08:41 | AJD | TAL NSH |
| Total/NA | Analysis | 6010C | | 1 | 50 mL | 50 mL | 211893 | 12/05/14 13:47 | LEG | TAL NSH |

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

| Method | Method Description | Protocol | Laboratory |
|--------|--------------------|----------|------------|
| 6010C | Metals (ICP) | SW846 | TAL NSH |

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-66581-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|------------------------|---------------|------------|------------------|-----------------|
| A2LA | A2LA | | NA: NELAP & A2LA | 12-31-15 |
| A2LA | ISO/IEC 17025 | | 0453.07 | 12-31-15 |
| Alaska (UST) | State Program | 10 | UST-087 | 10-31-15 |
| Arizona | State Program | 9 | AZ0473 | 05-05-15 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-15 |
| California | NELAP | 9 | 1168CA | 10-31-14 * |
| Connecticut | State Program | 1 | PH-0220 | 12-31-15 |
| Florida | NELAP | 4 | E87358 | 06-30-15 |
| Illinois | NELAP | 5 | 200010 | 12-09-15 |
| Iowa | State Program | 7 | 131 | 04-01-16 |
| Kansas | NELAP | 7 | E-10229 | 01-31-15 |
| Kentucky (UST) | State Program | 4 | 19 | 06-30-15 |
| Kentucky (WW) | State Program | 4 | 90038 | 12-31-14 * |
| Louisiana | NELAP | 6 | 30613 | 06-30-15 |
| Maryland | State Program | 3 | 316 | 03-31-15 |
| Massachusetts | State Program | 1 | M-TN032 | 06-30-15 |
| Minnesota | NELAP | 5 | 047-999-345 | 12-31-15 |
| Mississippi | State Program | 4 | N/A | 06-30-15 |
| Montana (UST) | State Program | 8 | NA | 02-24-20 |
| Nevada | State Program | 9 | TN00032 | 07-31-15 |
| New Hampshire | NELAP | 1 | 2963 | 10-09-15 |
| New Jersey | NELAP | 2 | TN965 | 06-30-15 |
| New York | NELAP | 2 | 11342 | 03-31-15 |
| North Carolina (WW/SW) | State Program | 4 | 387 | 12-31-15 |
| North Dakota | State Program | 8 | R-146 | 06-30-15 |
| Ohio VAP | State Program | 5 | CL0033 | 10-16-15 |
| Oklahoma | State Program | 6 | 9412 | 08-31-15 |
| Oregon | NELAP | 10 | TN200001 | 04-29-15 |
| Pennsylvania | NELAP | 3 | 68-00585 | 06-30-15 |
| Rhode Island | State Program | 1 | LAO00268 | 12-30-14 * |
| South Carolina | State Program | 4 | 84009 (001) | 02-28-15 |
| South Carolina (DW) | State Program | 4 | 84009 (002) | 02-23-17 |
| Tennessee | State Program | 4 | 2008 | 02-23-17 |
| Texas | NELAP | 6 | T104704077 | 08-31-15 |
| USDA | Federal | | S-48469 | 10-30-16 |
| Utah | NELAP | 8 | TN00032 | 07-31-15 |
| Virginia | NELAP | 3 | 460152 | 06-14-15 |
| Washington | State Program | 10 | C789 | 07-19-15 |
| West Virginia DEP | State Program | 3 | 219 | 02-28-15 |
| Wisconsin | State Program | 5 | 998020430 | 08-31-15 |
| Wyoming (UST) | A2LA | 8 | 453.07 | 12-31-15 |

* Certification renewal pending - certification considered valid.

TestAmerica Nashville

COOLER RECEIPT FORM



490-66581 Chain of Custody

Cooler Received/Opened On 11/18/2014 @ 0900

1. Tracking # 9690 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 0.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EJA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) EJA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) EJA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) EJA

I certify that I attached a label with the unique LIMS number to each container (initial) EJA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66581-1

Login Number: 66581

List Source: TestAmerica Nashville

List Number: 1

Creator: Abernathy, Eric

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is \leq background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T: 1-360-577-7222
F: 1-360-636-1068
www.alsglobal.com

December 34, 2014

Analytical Report for Service Request No: K1412945

Manu Ajmani
Arcadis
8725 Rosehill
Suite 350
Lenexa, KS 66215

RE: Rio Tinto/UCCO 1649.001

Dear Manu:

Enclosed are the results of the sample(s) submitted to our laboratory on November 15, 2014. For your reference, these analyses have been assigned our service request number **K1412945**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at gregory.salata@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Gregory Salata, Ph.D.
Client Services Manager

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Acronyms

| | |
|------------|--|
| ASTM | American Society for Testing and Materials |
| A2LA | American Association for Laboratory Accreditation |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MCL | Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| NA | Not Applicable |
| NC | Not Calculated |
| NCASI | National Council of the Paper Industry for Air and Stream Improvement |
| ND | Not Detected |
| NIOSH | National Institute for Occupational Safety and Health |
| PQL | Practical Quantitation Limit |
| RCRA | Resource Conservation and Recovery Act |
| SIM | Selected Ion Monitoring |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. |

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

| Agency | Web Site | Number |
|--------------------------|---|---------------|
| Alaska DEC UST | http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx | UST-040 |
| Arizona DHS | http://www.azdhs.gov/lab/license/env.htm | AZ0339 |
| Arkansas - DEQ | http://www.adeq.state.ar.us/techsvs/labcert.htm | 88-0637 |
| California DHS (ELAP) | http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx | 2795 |
| DOD ELAP | http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm | L14-51 |
| Florida DOH | http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm | E87412 |
| Hawaii DOH | Not available | - |
| Idaho DHW | http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx | - |
| ISO 17025 | http://www.pjllabs.com/ | L14-50 |
| Louisiana DEQ | http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx | 03016 |
| Maine DHS | Not available | WA01276 |
| Michigan DEQ | http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html | 9949 |
| Minnesota DOH | http://www.health.state.mn.us/accreditation | 053-999-457 |
| Montana DPHHS | http://www.dphhs.mt.gov/publichealth/ | CERT0047 |
| Nevada DEP | http://ndep.nv.gov/bsdwlabservice.htm | WA01276 |
| New Jersey DEP | http://www.nj.gov/dep/oqa/ | WA005 |
| North Carolina DWQ | http://www.dwqlab.org/ | 605 |
| Oklahoma DEQ | http://www.deq.state.ok.us/CSDnew/labcert.htm | 9801 |
| Oregon – DEQ (NELAP) | http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx | WA100010 |
| South Carolina DHEC | http://www.scdhec.gov/environment/envserv/ | 61002 |
| Texas CEQ | http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html | T104704427 |
| Washington DOE | http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html | C544 |
| Wisconsin DNR | http://dnr.wi.gov/ | 998386840 |
| Wyoming (EPA Region 8) | http://www.epa.gov/region8/water/dwhome/wyomingdi.html | - |
| Kelso Laboratory Website | www.alsglobal.com | NA |

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.



Case Narrative

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client: ARCADIS U.S., Inc.
Project: Rio Tinto/ UCCO 1649.001
Sample Matrix: Water

Service Request No.: K1412945
Date Received: 11/15/14

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Eight water samples were received for analysis at ALS Environmental on 11/15/14. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total and Dissolved Metals

Matrix Spike Recovery Exceptions:

The control criteria for matrix spike recovery of Arsenic for the Batch QC1 and Batch QC2 samples were not applicable. The analyzed concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____

Gregory Salata



Chain of Custody

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order # K1412945

| | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|--------------------------------------|------------|--------|--|-----------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Send Results to: | Contact & Company Name: | Telephone: | | Preservative | C | C | | | | | | | | | | | | | | | |
| | Address: | Fax: | | Filtered (✓) | ✓ | | | | | | | | | | | | | | | | |
| | City | State | Zip | E-mail Address: | # of Containers | 7 | 9 | | | | | | | | | | | | | | |
| | Project Name/Location (City, State): | Project #: | | <div style="display: flex; justify-content: space-around;"> <div style="transform: rotate(-45deg);"> Asenic (Total) Method 7062 </div> <div style="transform: rotate(-45deg);"> Asenic (Dissolved) Method 7062 </div> </div> | | | | | | | | | | | | | | | | | |
| Sampler's Printed Name: | Sampler's Signature: | | | | | | | | | | | | | | | | | | | | |
| Sample ID | Collection | Type (✓) | Matrix | | | | | | | | | | | | | | | | | | |
| | Date | Time | Comp | Grab | | | | | | | | | | | | | | | | | |
| GWM-6A(20141112) | 11-12-14 | 1220 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |
| GWM-13D(20141112) | | 1315 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |
| GWM-5A(20141112) | | 1400 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |
| GWM-5D(20141112) | | 1415 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |
| GWM-4A(20141112) | | 1430 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |
| GWM-4D(20141112) | | 1445 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |
| FB-02(20141112) | | 1430 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |
| GWM-2B(20141114) | 11-14-14 | 1630 | ✓ | W | 1 | 1 | | | | | | | | | | | | | | | |

Keys

Preservation Key:
A. H₂SO₄
B. HCL
C. HNO₃
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

REMARKS

Special Instructions/Comments: Dissolved Arsenic is field filtered ☐ Special QA/QC Instructions(✓):

| Laboratory Information and Receipt | | Relinquished By | Received By | Relinquished By | Laboratory Received By |
|---|---|-----------------|---------------|-----------------|------------------------|
| Lab Name: | Cooler Custody Seal (✓) | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| <input type="checkbox"/> Cooler packed with ice (✓) | <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact | Signature: | Signature: | Signature: | Signature: |
| Specify Turnaround Requirements: | Sample Receipt: | Firm: | Firm/Courier: | Firm/Courier: | Firm: |
| Shipping Tracking #: | Condition/Cooler Temp: _____ | Date/Time: | Date/Time: | Date/Time: | Date/Time: |

PC GS

Cooler Receipt and Preservation Form

Client / Project: Arceuthobium Service Request K14 12945
Received: 11/15/14 Opened: 11/15/14 By: BK Unloaded: 11/15/14 By: BK

1. Samples were received via? Mail Fed Ex UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 front
If present, were custody seals intact? Y N If present, were they signed and dated? Y N

| Raw Cooler Temp | Corrected Cooler Temp | Raw Temp Blank | Corrected Temp Blank | Corr. Factor | Thermometer ID | Cooler/COC ID | Tracking Number | NA | Filed |
|-----------------|-----------------------|----------------|----------------------|--------------|----------------|---------------|----------------------|----|-------|
| <u>-0.4</u> | <u>-0.3</u> | <u>—</u> | <u>—</u> | <u>4.1</u> | <u>340</u> | <u>NA</u> | <u>80272403 8023</u> | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

4. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves trash bag
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Did all bottles arrive in good condition (unbroken)? Indicate in the table below. NA Y N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? Indicate major discrepancies in the table on page 2. NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? Indicate in the table below NA Y N
11. Were VOA vials received without headspace? Indicate in the table below. NA Y N
12. Was C12/Res negative? NA Y N

| Sample ID on Bottle | Sample ID on COC | Identified by: |
|---------------------|------------------|----------------|
| | | |
| | | |
| | | |

| Sample ID | Bottle Count Bottle Type | Out of Temp | Head- space | Broke | pH | Reagent | Volume added | Reagent Lot Number | Initials | Time |
|-----------|-----------------------------|----------------|----------------|-------|----|---------|-----------------|-----------------------|----------|------|
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Notes, Discrepancies, & Resolutions: _____



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-6S (20141112)

Lab Code: K1412945-001

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 31.9 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-6S (20141112)

Lab Code: K1412945-001DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|-----|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 1.0 | 0.2 | 2.0 | 11/21/14 | 12/04/14 | 0.4 | J | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-13D (20141112)

Lab Code: K1412945-002

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 39.2 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-13D (20141112)

Lab Code: K1412945-002DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 31.0 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-5S (20141112)

Lab Code: K1412945-003

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 46.2 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-5S (20141112)

Lab Code: K1412945-003DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 42.9 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-5D (20141112)

Lab Code: K1412945-004

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 58.5 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-5D (20141112)

Lab Code: K1412945-004DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 51.9 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-4S (20141112)

Lab Code: K1412945-005

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 31.6 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-4S (20141112)

Lab Code: K1412945-005DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 23.2 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc **Service Request:** K1412945
Project No.: UCCO 1646.001 **Date Collected:** 11/12/14
Project Name: Rio Tinto **Date Received:** 11/15/14
Matrix: WATER **Units:** ug/L
Basis: NA

Sample Name: GWM-4D (20141112) **Lab Code:** K1412945-006

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 64.6 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-4D (20141112)

Lab Code: K1412945-006DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 10.0 | 2.0 | 20.0 | 11/21/14 | 12/04/14 | 57.1 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: FB-02 (20141112)

Lab Code: K1412945-007

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|-----|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 1.0 | 0.2 | 2.0 | 11/21/14 | 12/04/14 | 0.2 | U | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/12/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: FB-02 (20141112)

Lab Code: K1412945-007DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|-----|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 1.0 | 0.2 | 2.0 | 11/21/14 | 12/04/14 | 0.2 | U | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/14/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-2B (20141114)

Lab Code: K1412945-008

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 20.0 | 4.0 | 40.0 | 11/21/14 | 12/04/14 | 123 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected: 11/14/14

Project Name: Rio Tinto

Date Received: 11/15/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-2B (20141114)

Lab Code: K1412945-008DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 20.0 | 4.0 | 40.0 | 11/21/14 | 12/04/14 | 136 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Date Collected:

Project Name: Rio Tinto

Date Received:

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: K1412945-MB

Lab Code: K1412945-MB

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|-----|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 1.0 | 0.2 | 2.0 | 11/21/14 | 12/04/14 | 0.2 | U | |

Comments:

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

ICV Source: Inorganic Ventures

CCV Source: ALS MIXED

Concentration Units: ug/L

| | Initial Calibration | | | Continuing Calibration | | | | | |
|---------|---------------------|-------|-------|------------------------|-------|-------|-------|-------|--------|
| Analyte | True | Found | %R(1) | True | Found | %R(1) | Found | %R(1) | Method |
| Arsenic | 7.50 | 7.49 | 100 | 7.50 | 7.19 | 96 | 7.13 | 95 | 7062 |

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

ICV Source: Inorganic Ventures

CCV Source: ALS MIXED

Concentration Units: ug/L

| | Initial Calibration | | | Continuing Calibration | | | | | |
|---------|---------------------|-------|-------|------------------------|-------|-------|-------|-------|--------|
| Analyte | True | Found | %R(1) | True | Found | %R(1) | Found | %R(1) | Method |
| Arsenic | | | | 7.50 | 7.02 | 94 | 7.67 | 102 | 7062 |

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

ICV Source: Inorganic Ventures

CCV Source: ALS MIXED

Concentration Units: ug/L

| | Initial Calibration | | | Continuing Calibration | | | | | |
|---------|---------------------|-------|-------|------------------------|-------|-------|-------|-------|--------|
| Analyte | True | Found | %R(1) | True | Found | %R(1) | Found | %R(1) | Method |
| Arsenic | | | | 7.50 | 7.73 | 103 | 7.68 | 102 | 7062 |

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

ICV Source: Inorganic Ventures

CCV Source: ALS MIXED

Concentration Units: ug/L

| | Initial Calibration | | | Continuing Calibration | | | | | |
|---------|---------------------|-------|-------|------------------------|-------|-------|-------|-------|--------|
| Analyte | True | Found | %R(1) | True | Found | %R(1) | Found | %R(1) | Method |
| Arsenic | | | | 7.50 | 7.65 | 102 | 7.76 | 103 | 7062 |

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

ICV Source: Inorganic Ventures

CCV Source: ALS MIXED

Concentration Units: ug/L

| | Initial Calibration | | | Continuing Calibration | | | | | |
|---------|---------------------|-------|-------|------------------------|-------|-------|-------|-------|--------|
| Analyte | True | Found | %R(1) | True | Found | %R(1) | Found | %R(1) | Method |
| Arsenic | | | | 7.50 | 7.73 | 103 | | | 7062 |

Metals

- 2b -

CRDL STANDARD FOR AA AND ICP

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

Concentration Units: ug/L

| Analyte | CRDL Standard for AA | | | CRDL Standard for ICP | | | | |
|---------|----------------------|-------|----|-----------------------|-------|----|-------|----|
| | True | Found | %R | Initial | Final | | | |
| | True | Found | %R | True | Found | %R | Found | %R |
| Arsenic | 0.50 | 0.48 | 96 | | | | | |

Metals
 - 5A -
 SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc Service Request: K1412945
 Project No.: UCCO 1646.001 Units: UG/L
 Project Name: Rio Tinto Basis: NA
 Matrix: WATER

Sample Name: Batch QC1S Lab Code: K1412993-001S

| Analyte | Control Limit %R | Spike Result | C | Sample Result | C | Spike Added | %R | Q | Method |
|---------|---------------------|-----------------|---|------------------|---|----------------|---------|---|--------|
| Arsenic | | 23300 | | 24000 | | 16.00 | -4375.0 | | 7062 |

An empty field in the Control Limit column indicates the control limit is not applicable

Metals
 - 5A -
 SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc Service Request: K1412945
 Project No.: UCCO 1646.001 Units: UG/L
 Project Name: Rio Tinto Basis: NA
 Matrix: WATER

Sample Name: Batch QC2S Lab Code: K1412993-001DISSS

| Analyte | Control Limit %R | Spike Result | C | Sample Result | C | Spike Added | %R | Q | Method |
|---------|---------------------|-----------------|---|------------------|---|----------------|---------|---|--------|
| Arsenic | | 22300 | | 23300 | | 16.00 | -6250.0 | | 7062 |

An empty field in the Control Limit column indicates the control limit is not applicable

Metals
 - 5B -
 POST SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc Service Request: K1412945
 Project No.: UCCO 1646.001 Units: UG/L
 Project Name: Rio Tinto Basis: NA
 Matrix: WATER

Sample Name: GWM-6S (20141112)A Lab Code: K1412945-001A

| Analyte | Control Limit %R | Spike Result | C | Sample Result | C | Spike Added | %R | Q | Method |
|---------|---------------------|-----------------|---|------------------|---|----------------|------|---|--------|
| Arsenic | 80 - 120 | 6.3 | | 1.6 | | 5.0 | 94.0 | | 7062 |

- 6 -

DUPLICATES

Service Request: K1412945

Units: UG/L

Basis: NA

Matrix: WATER

Lab Code: K1412993-001D

| Analyte | Control Limit | Sample (S) C | Duplicate (D) C | RPD | Q | Method |
|---------|---------------|--------------|-----------------|-----|---|--------|
| Arsenic | | 24000 | 23300 | 3.0 | | 7062 |

Form VI - IN

- 6 -

DUPLICATES

Service Request: K1412945

Units: UG/L

Basis: NA

Matrix: WATER

Lab Code: K1412993-001DISSD

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | Method |
|---------|---------------|------------|---|---------------|---|-----|---|--------|
| Arsenic | | 23300 | | 21300 | | 9.0 | | 7062 |

Form VI - IN

- 7 -

LABORATORY CONTROL SAMPLE

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

Solid LCS Source:

| Analyte | Aqueous (ug/L) | | | Solid (mg/kg) | | | | |
|---------|----------------|-------|------|---------------|-------|---|--------|----|
| | True | Found | %R | True | Found | C | Limits | %R |
| Arsenic | 10 | 9.6 | 96.0 | | | | | |

- 10 -

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

ICP/ICP-MS ID #:

GFAA ID #: K-FLAA-02

AA ID #:

| Analyte | Wave-length (nm) | Back-ground | MRL ug/L | MDL ug/L | M |
|---------|------------------|-------------|----------|----------|---|
| Arsenic | 193.6 | | 0.5 | 0.1 | H |

Comments:

Metals
-13-
PREPARATION LOG

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Project Name: Rio Tinto

Method: F

| Sample ID | Preparation Date | Initial Volume | Final Volume(mL) |
|-------------------|------------------|----------------|------------------|
| K1412945-001 | 11/21/14 | 50.0 | 50.0 |
| K1412945-001DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-002 | 11/21/14 | 50.0 | 50.0 |
| K1412945-002DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-003 | 11/21/14 | 50.0 | 50.0 |
| K1412945-003DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-004 | 11/21/14 | 50.0 | 50.0 |
| K1412945-004DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-005 | 11/21/14 | 50.0 | 50.0 |
| K1412945-005DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-006 | 11/21/14 | 50.0 | 50.0 |
| K1412945-006DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-007 | 11/21/14 | 50.0 | 50.0 |
| K1412945-007DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-008 | 11/21/14 | 50.0 | 50.0 |
| K1412945-008DISS | 11/21/14 | 50.0 | 50.0 |
| K1412945-MB | 11/21/14 | 50.0 | 50.0 |
| K1412993-001D | 11/21/14 | 50.0 | 50.0 |
| K1412993-001DISSD | 11/21/14 | 50.0 | 50.0 |
| K1412993-001DISSS | 11/21/14 | 50.0 | 50.0 |
| K1412993-001S | 11/21/14 | 50.0 | 50.0 |
| LCSW | 11/21/14 | 50.0 | 50.0 |

Metals
- 14 -
ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Run Number: 120414-As1

Project Name: Rio Tinto

Instrument ID Number: K-FLAA-02

Method: H

Start Date: 12/04/14

End Date: 12/04/14

| Sample No. | D/F | Time | % R | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|------|-------|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|--|--|--|--|
| | | | | A L | S B | A S | B A | B E | C D | C A | C R | C O | C U | F E | P B | M G | M N | H G | N I | K S | S E | A G | N A | T L | V | Z N | C N | | | | |
| CAL BLK | 1.0 | 09:09 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 0.5 | 1.0 | 09:11 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 1.0 | 1.0 | 09:13 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 5.0 | 1.0 | 09:15 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 7.5 | 1.0 | 09:17 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 10.0 | 1.0 | 09:20 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICV | 1.0 | 09:22 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICB | 1.0 | 09:28 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CRA | 1.0 | 09:30 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 09:33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV1 | 1.0 | 09:35 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB1 | 1.0 | 09:37 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-MB | 2.0 | 09:40 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| LCSW | 2.0 | 09:42 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-001 | 20.0 | 09:44 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-001A | 1.0 | 09:46 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-002 | 20.0 | 09:49 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-003 | 20.0 | 09:51 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-004 | 20.0 | 09:53 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-005 | 20.0 | 09:56 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-006 | 20.0 | 09:58 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-007 | 2.0 | 10:00 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV2 | 1.0 | 10:02 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB2 | 1.0 | 10:05 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-008 | 40.0 | 10:07 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 10:09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-002DISS | 20.0 | 10:11 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-003DISS | 20.0 | 10:14 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-004DISS | 20.0 | 10:16 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-005DISS | 20.0 | 10:18 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-006DISS | 20.0 | 10:20 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-007DISS | 2.0 | 10:23 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals
- 14 -
ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Run Number: 120414-As1

Project Name: Rio Tinto

Instrument ID Number: K-FLAA-02

Method: H

Start Date: 12/04/14

End Date: 12/04/14

| Sample No. | D/F | Time | % R | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---------|-------|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|--|--|--|--|
| | | | | A L | S B | A S | B A | B E | C D | C A | C R | C O | C U | F E | P B | M G | M N | H G | N I | K S | S E | A G | N A | T L | V | Z N | C N | | | | |
| K1412945-008DISS | 40.0 | 10:25 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10,000. | 10:27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV3 | 1.0 | 10:29 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB3 | 1.0 | 10:32 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001D | 10,000. | 10:34 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001S | 10,000. | 10:36 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10,000. | 10:38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10,000. | 10:41 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001DISSD | 10,000. | 10:43 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001DISSS | 10,000. | 10:45 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10,000. | 10:47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 10:49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 10:52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100.0 | 10:54 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV4 | 1.0 | 10:56 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB4 | 1.0 | 10:58 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 11:01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 11:03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 11:05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100.0 | 11:07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 11:10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 11:12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 11:14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2,000.0 | 11:17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 4.0 | 11:19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2,000.0 | 11:21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV5 | 1.0 | 11:23 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB5 | 1.0 | 11:26 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 11:28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100.0 | 11:30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100.0 | 11:32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 11:34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals
- 14 -
ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Run Number: 120414-As1

Project Name: Rio Tinto

Instrument ID Number: K-FLAA-02

Method: H

Start Date: 12/04/14

End Date: 12/04/14

| Sample No. | D/F | Time | % R | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---------|-------|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|-----|-----|--|--|--|--|
| | | | | A L | S B | A S | B A | B E | C D | C A | C R | C O | C U | F E | P B | M G | M N | H G | N I | K | S E | A G | N A | T L | V | Z N | C N | | | | |
| ZZZZZZ | 20.0 | 11:37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 11:39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100.0 | 11:41 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 11:43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 11:45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2,000.0 | 11:48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV6 | 1.0 | 11:50 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB6 | 1.0 | 11:52 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 4.0 | 11:54 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2,000.0 | 11:57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 11:59 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100.0 | 12:01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 12:10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 12:15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV7 | 1.0 | 12:17 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB7 | 1.0 | 12:19 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 40.0 | 12:26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 12:28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 12:32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 12:37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV8 | 1.0 | 12:44 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB8 | 1.0 | 12:46 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals

- 14 -

ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc

Service Request: K1412945

Project No.: UCCO 1646.001

Run Number: 120414-As1

Project Name: Rio Tinto

Instrument ID Number: K-FLAA-02

Method: H

Start Date: 12/04/14

End Date: 12/04/14

| Sample No. | D/F | Time | % R | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|------|-------|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|-----|-----|--|--|--|--|
| | | | | A L | S B | A S | B A | B E | C D | C A | C R | C O | C U | F E | P B | M G | M N | H G | N I | K | S E | A G | N A | T L | V | Z N | C N | | | | |
| ZZZZZZ | 2.0 | 12:48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 40.0 | 12:51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 12:53 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 12:55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.0 | 12:57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 12:59 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 13:02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-001DISS | 2.0 | 13:04 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV9 | 1.0 | 13:06 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB9 | 1.0 | 13:08 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14



Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run: 224036

Team: Metals

Analyst: Anna
Cheatley

Prep Workflow: MetDig3010A

Prep Method: EPA 3010A

Rush/NPDES: N/A

Status: Prepped

Current Step: Digestion

Prep Date: 11/21/2014

11:25

Due Date: 11/26/2014

Hold Date: 05/11/2015

| Lab Code | Client ID | Bottle # | Initial Amt | Final volume | Spike Amt | Spike ID | Test No List | Comments |
|-------------------------------|--------------------|----------|-------------|--------------|-----------|----------|--------------|--------------|
| KQ1415305-01 | Method Blank | | 50 mL | 50 mL | | | As D, AS_T | 6%HNO3,5%HCl |
| KQ1415305-02 | Lab Control Sample | | 50 mL | 50 mL | 0.2 mL | 74484 | As D, AS_T | 6%HNO3,5%HCl |
| K1412945-001 | GWM-6S (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-001 | GWM-6S (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-002 | GWM-13D (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-002 | GWM-13D (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-003 | GWM-5S (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-003 | GWM-5S (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-004 | GWM-5D (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-004 | GWM-5D (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-005 | GWM-4S (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-005 | GWM-4S (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-006 | GWM-4D (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-006 | GWM-4D (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-007 | FB-02 (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-007 | FB-02 (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-008 | GWM-2B (20141114) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-008 | GWM-2B (20141114) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412993-001 | GWM-8B (20141117) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412993-001 | GWM-8B (20141117) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-03 | Duplicate | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-05 | Duplicate | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-04 | Matrix Spike | .02 | 50 mL | 50 mL | 0.2 mL | 73067 | AS_T | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-06 | Matrix Spike | .01 | 50 mL | 50 mL | 0.2 mL | 73067 | As D | 6%HNO3,5%HCl |
| K1412993-002 | Dup-03 (20141117) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |

| | | | | | | | | |
|--------------|-------------------|-----|-------|-------|--|--|------|--------------|
| K1412993-002 | Dup-03 (20141117) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
|--------------|-------------------|-----|-------|-------|--|--|------|--------------|

16 Total Samples consisting of 10 Client Samples, 4 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

| Name | Type | ID | Expires | Name | Type | ID | Expires |
|--------------|-------|-------|----------|-----------|-------|-------|------------|
| K-MET GFLCSW | Spike | 74484 | 2/1/2015 | K-MET SS2 | Spike | 73067 | 12/20/2014 |

Preparation Materials

| Step | Name | ID | Step | Name | ID |
|-----------|------------|-------|-----------|----------------------------|-------|
| Digestion | K-MET HNO3 | 75020 | Digestion | K-MET 50ml Centrifuge Tube | 76731 |
| Digestion | K-MET HCL | 76516 | | | |

Preparation Hardware / Equipment

| Step | Name | Property | Value | Step | Name | Property | Value |
|-----------|---------------|------------------------|-------|-----------|---------------|------------------------|-------|
| Digestion | K-HotPlate-02 | Thermometer ID 1134195 | 97 | Digestion | K-HotPlate-06 | Thermometer ID 1134275 | 96 |
| Digestion | K-HotPlate-03 | Thermometer ID 1134442 | 96 | | | | |

Preparation Steps

| Step | Started | Finished | By | Assisted By | Training? | Comments |
|-----------|-----------------|-----------------|---------------|-------------|-----------|----------|
| Digestion | 21-NOV-14 11:25 | 21-NOV-14 14:53 | Anna Cheatley | | N | |

Comments

Thermometer ID 1134195 Observed temperature=97C. Correction factor=0. Corrected temperature=97C. Thermometer ID 1134442 Observed temperature=96C. Correction factor=0. Corrected temperature=96C. Thermometer ID 1134275 Observed temperature=96C. Correction factor=0. Corrected temperature=96C.

Review

Reviewed by: BSJ Date: 11/25/14

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

| Solution Name | Element | mLs of 1000ppm Solution | Final Volume | Solution Conc. mg/L | Enter mls Added |
|---------------|---------|-------------------------|--------------|---------------------|-----------------|
| K-MET SS1 | HNO3 | 50.0 | 1000ml | - | |
| | Al | 100* | 1000ml | 200 | |
| | Ag | 100* | 1000ml | 5 | |
| | Ba | 100* | 1000ml | 200 | |
| | Be | 100* | 1000ml | 5 | |
| | Cd | 100* | 1000ml | 5 | |
| | Co | 100* | 1000ml | 50 | |
| | Cr | 100* | 1000ml | 20 | |
| | Cu | 100* | 1000ml | 25 | |
| | Fe | 100* | 1000ml | 100 | |
| | Pb | 100* | 1000ml | 50 | |
| | Mn | 100* | 1000ml | 50 | |
| | Ni | 100* | 1000ml | 50 | |
| | Sb*** | 50 | 1000ml | 50 | |
| K-MET SS2 | HNO3 | 25.0 | 500ml | - | |
| | As | 2.0 | 500ml | 4 | |
| | Cd | 2.0 | 500ml | 4 | |
| | Pb | 2.0 | 500ml | 4 | |
| | Se | 2.0 | 500ml | 4 | |
| | Tl | 2.0 | 500ml | 4 | |
| K-MET SS3 | HNO3 | 25.0 | 500ml | - | |
| | As | 50.0 | 500ml | 100 | |
| | Se | 50.0 | 500ml | 100 | |
| | Tl | 50.0 | 500ml | 100 | |
| | Hg | 6 | 500 | 12 | |
| K-MET SS4 | HNO3 | 25 | 500ml | - | |
| | B | 50 | 500ml | 100 | |
| | Mo | 50 | 500ml | 100 | |
| K-MET SS5 | HNO3 | 10.0 | 200ml | - | |
| | K** | 20 | 200ml | 1000 | |
| | Na** | 20 | 200ml | 1000 | |
| | Mg** | 20 | 200ml | 1000 | |
| | Ca** | 20 | 200ml | 1000 | |

| | | | | | |
|------------------|-------------------|-------------|--------|------|--|
| K-MET GFLCSW | HNO3 | 10.0 | 1000ml | - | |
| | As, Pb, Se, Tl | 5.0 | 1000ml | 2.5 | |
| | Cd | - | - | 1.25 | |
| | Cu | 2.5 | 1000ml | 2.5 | |
| K-MET QCP-CICV-1 | Ca, Mg, Na, K | no dilution | - | 2500 | |
| | Al, Ba | no dilution | - | 1000 | |
| | Fe | no dilution | - | 500 | |
| | Co, Mn, Ni, V, Zn | no dilution | - | 250 | |
| | Cu, Ag | no dilution | - | 125 | |
| | Cr | no dilution | - | 100 | |
| | Be | no dilution | - | 25 | |
| K-MET QCP-CICV-2 | Sb | no dilution | - | 500 | |
| K-MET QCP-CICV-3 | As, Pb, Se, Tl | no dilution | - | 500 | |
| | Cd | no dilution | - | 250 | |

* Denotes volume of mixed stock standard.

** Denotes 10,000 ppm individual stock standards.

| Standard | mls of standard | ppm | Logbook # | Exp. Date |
|----------|-----------------|-----|-----------|-----------|
| | | | | |
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Element Analyzed: As ^{BSS} 12/4/14 Se Hydride Instrument: K-FLAA-02
 Service Request #: K1412945, K1412993, K1413402, K1413380
 Batch QC SR's #: K1412993, K1413402, K1413380
 Calibration Std.: AA1-16-D Expiration Date: 4/2/2015
 2nd Source Std.: AA1-16-C Expiration Date: 1/18/2015
 Starlims #: 424209
 Run #: 120414-As1

Hydride Data Review Form

| | Yes | No | NA |
|---|----------|-------------------|-------------------|
| 1. ICV within 10% of true Value | <u>X</u> | <u> </u> | <u> </u> |
| 2. Calibration data included | <u>X</u> | <u> </u> | <u> </u> |
| 3. CCV's in control | <u>X</u> | <u> </u> | <u> </u> |
| 4. CCB's and/or ICB's below MRL | <u>X</u> | <u> </u> | <u> </u> |
| 5. All reported Results within Cal. Range | <u>X</u> | <u> </u> | <u> </u> |
| 6. All Calculations are Correct | <u>X</u> | <u> </u> | <u> </u> |

Comments

Primary Reviewed by: BSS Date: 12/4/14

Secondary Reviewed by: JBB Date: 12/4/14


COLUMBIA ANALYTICAL SERVICES, INC.

FAA Run Log

| | |
|---|----------------------------|
| Method: (Circle Method Used) 7742 <u>7062</u> Other: _____ Element: <u>As, Se</u> | Service Request # : |
|---|----------------------------|

| SAMPLE NUMBER | Dilution Factor | Measured (µg/L) | Recoveries (ICV, CCV, CRA, LCS, Matrix Spk.) | Comments |
|-----------------------------|---------------------|-------------------|--|----------------------|
| | | | | Post Spike = 5 ppb |
| Cal. Blk | - | 0.000 | | |
| Cal. Std 0.5 | - | 0.500 | *(0.025-50ml) | *Cal. Std = AA1-16-D |
| Cal. Std 1.0 | - | 1.000 | *(0.05-50ml) | |
| Cal. Std 5.0 | - | 5.000 | *(0.25-50ml) | |
| Cal. Std 7.5 | - | 7.500 | *(0.375-50ml) | |
| Cal. Std 10.0 | - | 10.000 | *(0.5-50ml) | |
| ICV | - | 7.485 | 100% | ICV Std = AA1-16-C |
| ICB | - | 0.047 | | |
| CRA | - | 0.483 | 97% | |
| CCV | - | 6.692 | 89% | |
| CCV | - | 7.191 | 96% | |
| CCB | - | 0.050 | | |
| K1412945-MB | 1/2 | 0.006 | | |
| LCSWK1412945 | 1/2 | 4.808 | 96% | |
| K1412945-001 | 1/2*1/10 | 1.594 | | |
| K1412945-001A | 1/2*1/10 | 6.301 | 94% | |
| K1412945-002 | 1/2*1/20 | 1.962 | | |
| K1412945-003 | 1/2*1/20 | 2.311 | | |
| K1412945-004 | 1/2*1/10 | 2.923 | | |
| K1412945-005 | 1/2*1/10 | 1.582 | | |
| K1412945-006 | 1/2*1/10 | 3.229 | | |
| K1412945-007 | 1/2 | 0.021 | | |
| CCV | - | 7.128 | 95% | |
| CCB | - | 0.058 | | |
| K1412945-008 | 1/2*1/20 | 3.087 | | |
| K1412945-001DISS | 1/2*1/10 | -0.164 | <i>KIS 12/4/14</i> | |
| K1412945-002DISS | 1/2*1/20 | 1.548 | | |
| K1412945-003DISS | 1/2*1/20 | 2.146 | | |
| K1412945-004DISS | 1/2*1/10 | 2.594 | | |
| K1412945-005DISS | 1/2*1/10 | 1.162 | | |

| | | | | |
|--|-----------------|-----------------|---------------------|-----------------|
| True Values/QC Limits: | LCSW | Water Spike | LCSS (ERA D045540) | Soil Spike |
| Arsenic: | 10ppb (80-120%) | 16ppb (75-125%) | 99.6mg/kg (70-130%) | 40ppb (75-125%) |
| Selenium | 10ppb (80-120%) | 16ppb (75-125%) | 150mg/kg (68-132%) | 40ppb (75-125%) |
| Cx = MSA Corrected Concentration (as per method) | | | | |

| | | |
|---|-------------------------|--------------------------|
| Analyst  | Date: 12/4/14 | Page Number: 1 |
|---|-------------------------|--------------------------|


COLUMBIA ANALYTICAL SERVICES, INC.

FAA Run Log

| | |
|--|----------------------------|
| Method: (Circle Method Used) 7742 <u>7062</u> Other: _____ Element: <u>As Se</u> | Service Request # : |
|--|----------------------------|

| SAMPLE NUMBER | Dilution Factor | Measured (µg/L) | Recoveries (ICV, CCV, CRA, LCS, Matrix Spk.) | Comments Post Spike = 5 ppb |
|-------------------|--------------------|--------------------|--|------------------------------------|
| K1412945-006DISS | 1/2*1/10 | 2.857 | | |
| K1412945-007DISS | 1/2 | 0.086 | | |
| K1412945-008DISS | 1/2*1/20 | 3.398 | | |
| K1412993-001 | 1/2*1/5000 | 2.403 | | |
| CCV | - | 7.019 | 94% | |
| CCB | - | 0.058 | | |
| K1412993-001D | 1/2*1/5000 | 2.328 | | |
| K1412993-001S | 1/2*1/5000 | 2.333 | Sample is 4X | |
| K1412993-002 | 1/2*1/5000 | 2.393 | | |
| K1412993-001DISS | 1/2*1/5000 | 2.329 | | |
| K1412993-001DDISS | 1/2*1/5000 | 2.129 | | |
| K1412993-001SDISS | 1/2*1/5000 | 2.226 | Sample is 4X | |
| K1412993-002DISS | 1/2*1/5000 | 2.815 | | |
| K1413402-MB | 1/2 | 0.017 | | |
| LCSWK1413402 | 1/2 | 4.886 | 98% | |
| K1413402-001 | 1/2*1/50 | 2.121 | | |
| CCV | - | 7.665 | 102% | |
| CCB | - | 0.075 | | |
| K1413402-002 | 1/2*1/10 | 2.872 | | |
| K1413402-002D | 1/2*1/10 | 2.811 | | |
| K1413402-002S | 1/2*1/10 | 3.483 | 76% | |
| K1413402-003 | 1/2*1/50 | 2.119 | | |
| K1413402-004 | 1/2 | 0.115 | | |
| K1413402-004A | 1/2 | 4.835 | 97% | |
| K1413402-005 | 1/2*1/5 | 1.668 | | |
| K1413402-006 | 1/2*1/1000 | 1.889 | | |
| K1413402-007 | 1/2*1/2 | 1.962 | | |
| K1413402-008 | 1/2*1/1000 | 2.711 | | |
| CCV | - | 7.727 | 103% | |
| CCB | - | 0.081 | | |

| | | | | |
|--|-----------------|-----------------|----------------------|-----------------|
| True Values/QC Limits: | LCSW | Water Spike | LCSS (ERA D045540) | Soil Spike |
| Arsenic: | 10ppb (80-120%) | 16ppb (75-125%) | 146.0mg/kg (80-120%) | 20ppb (75-125%) |
| Selenium | 10ppb (80-120%) | 16ppb (75-125%) | 192.0mg/kg (62-147%) | 20ppb (75-125%) |
| Cx = MSA Corrected Concentration (as per method) | | | | |

| | | |
|--|-------------------------|--------------------------|
| Analyst  | Date: 12/4/17 | Page Number: 2 |
|--|-------------------------|--------------------------|

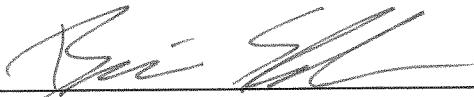
COLUMBIA ANALYTICAL SERVICES, INC.

FAA Run Log

| | |
|---|---------------------|
| Method: (Circle Method Used) 7742 <u>7062</u> Other: _____ Element: <u>As Se</u> | Service Request # : |
|---|---------------------|


| SAMPLE NUMBER | Dilution Factor | Measured (µg/L) | Recoveries (ICV, CCV, CRA, LCS, Matrix Spk.) | | Comments Post Spike = 5 ppb |
|-------------------|--------------------|--------------------|--|--|------------------------------------|
| K1413402-009 | 1/2 | 0.130 | | | |
| K1413402-010 | 1/2*1/50 | 2.013 | | | |
| K1413402-001DISS | 1/2*1/50 | 2.431 | | | |
| K1413402-002DISS | 1/2*1/10 | 2.617 | | | |
| K1413402-002DDISS | 1/2*1/10 | 2.752 | | | |
| K1413402-002SDISS | 1/2*1/10 | 3.440 | 103% | | |
| K1413402-003DISS | 1/2*1/50 | 2.517 | | | |
| K1413402-004DISS | 1/2 | 0.094 | | | |
| K1413402-005DISS | 1/2*1/5 | 1.361 | | | |
| K1413402-006DISS | 1/2*1/1000 | 2.020 | | | |
| CCV | - | 7.677 | 102% | | |
| CCB | - | 0.079 | | | |
| K1413402-007DISS | 1/2*1/2 | 1.552 | | | |
| K1413402-008DISS | 1/2*1/1000 | 2.338 | | | |
| K1413402-009DISS | 1/2 | 0.084 | | | |
| K1413402-010DISS | 1/2*1/50 | 1.547 | | | |
| K1413380-MB | 1/2 | 0.011 | | | |
| LCSWK1413380 | 1/2 | 4.922 | 98% | | |
| K1413380-001 | 1/2 | 0.193 | | | |
| K1413380-002 | 1/2*1/5 | 1.764 | | | |
| K1413380-003 | 1/2 | 0.541 | | | |
| K1413380-003A | 1/2 | 5.193 | 95% | | |
| CCV | - | 7.650 | 102% | | |
| CCB | - | 0.095 | | | |
| K1413380-003D | 1/2 | 0.473 | | | |
| K1413380-003S | 1/2 | 8.533 | 101% | | |
| K1413380-004 | 1/2*1/20 | 2.182 | | | |
| K1413380-005 | 1/2*1/5 | 2.154 | | | |
| K1413380-006 | 1/2 | 0.047 | | | |
| K1413380-007 | 1/2*1/5 | 1.977 | | | |

| | | | | |
|--|-----------------|-----------------|----------------------|-----------------|
| True Values/QC Limits: | LCSW | Water Spike | LCSS (ERA D045540) | Soil Spike |
| Arsenic: | 10ppb (80-120%) | 16ppb (75-125%) | 146.0mg/kg (80-120%) | 20ppb (75-125%) |
| Selenium | 10ppb (80-120%) | 16ppb (75-125%) | 192.0mg/kg (62-147%) | 20ppb (75-125%) |
| Cx = MSA Corrected Concentration (as per method) | | | | |

| | | |
|--|-------------------|-------------------|
| Analyst  | Date: 12/14/14 | Page Number: 3 |
|--|-------------------|-------------------|

FAA Run Log

[illegible]

| | | |
|--|-------------------|-------------------|
| Analyst  | Date: 12/14/14 | Page Number: 4 |
|--|-------------------|-------------------|

=====
Analysis Begun

Logged In Analyst: ALKLS.ALKLSXP315 Technique: AA FIAS-Flame
Spectrometer Model: AAnalyst 200, S/N 200S5061701 Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif

Batch ID: 120414-As1

Results Data Set: 120414-As1

Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

=====
Sequence No.: 1 Autosampler Location: 1
Sample ID: Cal Blk Date Collected: 12/4/2014 9:09:02 AM
Analyst: Data Type: Original
=====

Replicate Data: Cal Blk

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [0.00] | 0.003 | -0.007 | 0.003 | | | 09:09:18 | Yes |
| 2 | | [0.00] | 0.001 | -0.012 | 0.001 | | | 09:09:52 | Yes |
| 3 | | [0.00] | 0.002 | 0.005 | 0.002 | | | 09:10:26 | Yes |
| Mean: | | [0.00] | 0.002 | | | | | | |
| SD: | | 0.00 | 0.0008 | | | | | | |
| %RSD: | | 0.00 | 38.71 | | | | | | |

Auto-zero performed.

=====
Sequence No.: 2 Autosampler Location: 2
Sample ID: Std 0.5 Date Collected: 12/4/2014 9:11:14 AM
Analyst: Data Type: Original
=====

Replicate Data: Std 0.5

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [0.5] | 0.027 | 0.098 | 0.029 | | | 09:11:31 | Yes |
| 2 | | [0.5] | 0.028 | 0.093 | 0.030 | | | 09:12:05 | Yes |
| 3 | | [0.5] | 0.027 | 0.096 | 0.029 | | | 09:12:39 | Yes |
| Mean: | | [0.5] | 0.027 | | | | | | |
| SD: | | 0.0 | 0.0006 | | | | | | |
| %RSD: | | 0.0 | 2.30 | | | | | | |

Standard number 1 applied. [0.5]
Correlation Coef.: 1.000000 Slope: 0.05422 Intercept: 0.00000

=====
Sequence No.: 3 Autosampler Location: 3
Sample ID: Std 1.0 Date Collected: 12/4/2014 9:13:28 AM
Analyst: Data Type: Original
=====

Replicate Data: Std 1.0

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [1.0] | 0.053 | 0.176 | 0.055 | | | 09:13:45 | Yes |
| 2 | | [1.0] | 0.053 | 0.176 | 0.055 | | | 09:14:19 | Yes |
| 3 | | [1.0] | 0.052 | 0.182 | 0.055 | | | 09:14:53 | Yes |
| Mean: | | [1.0] | 0.053 | | | | | | |
| SD: | | 0.0 | 0.0004 | | | | | | |
| %RSD: | | 0.0 | 0.76 | | | | | | |

Standard number 2 applied. [1.0]
Correlation Coef.: 0.999361 Slope: 0.05303 Intercept: 0.00000

=====
Sequence No.: 4 Autosampler Location: 4
Sample ID: Std 5.0 Date Collected: 12/4/2014 9:15:42 AM
Analyst: Data Type: Original
=====

Replicate Data: Std 5.0

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | | [5.0] | 0.249 | 0.853 | 0.252 | | | 09:16:00 | Yes |
| 2 | | [5.0] | 0.250 | 0.849 | 0.252 | | | 09:16:34 | Yes |
| 3 | | [5.0] | 0.250 | 0.855 | 0.252 | | | 09:17:08 | Yes |
| Mean: | | [5.0] | 0.250 | | | | | | |
| SD: | | 0.0 | 0.0004 | | | | | | |
| %RSD: | | 0.0 | 0.16 | | | | | | |

Standard number 3 applied. [5.0]
Correlation Coef.: 0.999812 Slope: 0.05014 Intercept: 0.00000

Sequence No.: 5

Sample ID: Std 7.5

Analyst:

Autosampler Location: 5

Date Collected: 12/4/2014 9:17:58 AM

Data Type: Original

Replicate Data: Std 7.5

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | | [7.5] | 0.367 | 1.260 | 0.369 | | | 09:18:16 | Yes |
| 2 | | [7.5] | 0.368 | 1.261 | 0.370 | | | 09:18:50 | Yes |
| 3 | | [7.5] | 0.373 | 1.277 | 0.375 | | | 09:19:24 | Yes |
| Mean: | | [7.5] | 0.370 | | | | | | |
| SD: | | 0.0 | 0.0033 | | | | | | |
| %RSD: | | 0.0 | 0.88 | | | | | | |

Standard number 4 applied. [7.5]
Correlation Coef.: 0.999852 Slope: 0.04955 Intercept: 0.00000

Sequence No.: 6

Sample ID: Std 10.0

Analyst:

Autosampler Location: 6

Date Collected: 12/4/2014 9:20:15 AM

Data Type: Original

Replicate Data: Std 10.0

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | | [10.0] | 0.480 | 1.632 | 0.482 | | | 09:20:34 | Yes |
| 2 | | [10.0] | 0.471 | 1.614 | 0.473 | | | 09:21:08 | Yes |
| 3 | | [10.0] | 0.475 | 1.634 | 0.477 | | | 09:21:41 | Yes |
| Mean: | | [10.0] | 0.475 | | | | | | |
| SD: | | 0.0 | 0.0042 | | | | | | |
| %RSD: | | 0.0 | 0.89 | | | | | | |

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999340 Slope: 0.04847 Intercept: 0.00000
The calibration curve may not be linear.

Calibration data for As 193.70

Equation: Linear Through Zero

| ID | Mean Signal (Abs) | Entered Conc. ug/L | Calculated Conc. ug/L | Standard Deviation | %RSD |
|----------|-------------------|--------------------|-----------------------|--------------------|------|
| Cal Blk | 0.0000 | 0 | 0.0000 | 0.00 | 38.7 |
| Std 0.5 | 0.0271 | 0.5 | 0.5594 | 0.00 | 2.3 |
| Std 1.0 | 0.0527 | 1.0 | 1.0879 | 0.00 | 0.8 |
| Std 5.0 | 0.2499 | 5.0 | 5.1565 | 0.00 | 0.2 |
| Std 7.5 | 0.3696 | 7.5 | 7.6257 | 0.00 | 0.9 |
| Std 10.0 | 0.4753 | 10.0 | 9.8068 | 0.00 | 0.9 |

Correlation Coef.: 0.999340 Slope: 0.04847 Intercept: 0.00000

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 7

Date Collected: 12/4/2014 9:22:32 AM

Data Type: Original

Replicate Data: ICV

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.532 | 7.532 | 0.365 | 1.258 | 0.367 | | | 09:22:52 | Yes |
| 2 | 7.398 | 7.398 | 0.359 | 1.240 | 0.361 | | | 09:23:26 | Yes |
| 3 | 7.526 | 7.526 | 0.365 | 1.247 | 0.367 | | | 09:24:01 | Yes |
| Mean: | 7.485 | 7.485 | 0.363 | | | | | | |
| SD: | 0.0756 | 0.0756 | 0.0037 | | | | | | |
| %RSD: | 1.011 | 1.011 | 1.01 | | | | | | |

QC value within limits for As 193.70 Recovery = 99.80%

All analyte(s) passed QC.

User canceled analysis.

=====
Analysis Begun

Logged In Analyst: ALKLS.ALKLSXP315

Technique: AA FIAS-Flame

Spectrometer Model: AAnalyst 200, S/N 200S5061701 Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif

Batch ID: 120414-As1

Results Data Set: 120414-As1

Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

Sequence No.: 8

Autosampler Location: 1

Sample ID: ICB

Date Collected: 12/4/2014 9:28:39 AM

Analyst:

Data Type: Original

Replicate Data: ICB

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0734 | 0.0734 | 0.004 | 0.028 | 0.006 | | | 09:28:55 | Yes |
| 2 | 0.0516 | 0.0516 | 0.002 | 0.027 | 0.005 | | | 09:29:29 | Yes |
| 3 | 0.0148 | 0.0148 | 0.001 | 0.010 | 0.003 | | | 09:30:03 | Yes |
| Mean: | 0.0466 | 0.0466 | 0.002 | | | | | | |
| SD: | 0.0296 | 0.0296 | 0.0014 | | | | | | |
| %RSD: | 63.54 | 63.54 | 63.54 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 9

Autosampler Location: 2

Sample ID: CRA

Date Collected: 12/4/2014 9:30:51 AM

Analyst:

Data Type: Original

Replicate Data: CRA

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.4925 | 0.4925 | 0.024 | 0.089 | 0.026 | | | 09:31:07 | Yes |
| 2 | 0.4785 | 0.4785 | 0.023 | 0.090 | 0.025 | | | 09:31:41 | Yes |
| 3 | 0.4780 | 0.4780 | 0.023 | 0.089 | 0.025 | | | 09:32:15 | Yes |
| Mean: | 0.4830 | 0.4830 | 0.023 | | | | | | |
| SD: | 0.0083 | 0.0083 | 0.0004 | | | | | | |
| %RSD: | 1.708 | 1.708 | 1.71 | | | | | | |

QC value within limits for As 193.70 Recovery = 96.60%

All analyte(s) passed QC.

Sequence No.: 10

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 9:33:04 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 6.705 | 6.705 | 0.325 | 1.113 | 0.327 | | | 09:33:22 | Yes |
| 2 | 6.705 | 6.705 | 0.325 | 1.116 | 0.327 | | | 09:33:56 | Yes |
| 3 | 6.666 | 6.666 | 0.323 | 1.120 | 0.325 | | | 09:34:29 | Yes |
| Mean: | 6.692 | 6.692 | 0.324 | | | | | | |
| SD: | 0.0229 | 0.0229 | 0.0011 | | | | | | |
| %RSD: | 0.3422 | 0.3422 | 0.34 | | | | | | |

QC value less than the lower limit for As 193.70 Recovery = 89.23%
QC Failed. Stop the analysis.
User canceled analysis.

=====
Analysis Begun

Logged In Analyst: ALKLS.ALKLSXP315 Technique: AA FIAS-Flame
Spectrometer Model: AAnalyst 200, S/N 200S5061701 Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif
Batch ID: 120414-As1
Results Data Set: 120414-As1
Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

Sequence No.: 10 Autosampler Location: 5
Sample ID: CCV Date Collected: 12/4/2014 9:35:36 AM
Analyst: Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.133 | 7.133 | 0.346 | 1.202 | 0.348 | | | 09:35:53 | Yes |
| 2 | 7.187 | 7.187 | 0.348 | 1.205 | 0.351 | | | 09:36:27 | Yes |
| 3 | 7.252 | 7.252 | 0.351 | 1.216 | 0.354 | | | 09:37:01 | Yes |
| Mean: | 7.191 | 7.191 | 0.349 | | | | | | |
| SD: | 0.0594 | 0.0594 | 0.0029 | | | | | | |
| %RSD: | 0.8256 | 0.8256 | 0.83 | | | | | | |

QC value within limits for As 193.70 Recovery = 95.88%
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 1
Sample ID: CCB Date Collected: 12/4/2014 9:37:52 AM
Analyst: Data Type: Original

Replicate Data: CCB

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0862 | 0.0862 | 0.004 | 0.023 | 0.006 | | | 09:38:08 | Yes |
| 2 | 0.0407 | 0.0407 | 0.002 | 0.007 | 0.004 | | | 09:38:42 | Yes |
| 3 | 0.0218 | 0.0218 | 0.001 | 0.003 | 0.003 | | | 09:39:16 | Yes |
| Mean: | 0.0496 | 0.0496 | 0.002 | | | | | | |
| SD: | 0.0331 | 0.0331 | 0.0016 | | | | | | |
| %RSD: | 66.78 | 66.78 | 66.78 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 9
Sample ID: K1412945-MB Date Collected: 12/4/2014 9:40:05 AM
Analyst: Data Type: Original

Replicate Data: K1412945-MB

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0103 | 0.0103 | 0.000 | 0.006 | 0.003 | | | 09:40:21 | Yes |

| | | | | | | | |
|-------|--------|--------|--------|--------|-------|----------|-----|
| 2 | 0.0005 | 0.0005 | 0.000 | -0.004 | 0.002 | 09:40:55 | Yes |
| 3 | 0.0081 | 0.0081 | 0.000 | 0.007 | 0.003 | 09:41:29 | Yes |
| Mean: | 0.0063 | 0.0063 | 0.000 | | | | |
| SD: | 0.0051 | 0.0051 | 0.0002 | | | | |
| %RSD: | 81.30 | 81.30 | 81.30 | | | | |

Sequence No.: 13
Sample ID: LCSWK1412945
Analyst:

Autosampler Location: 10
Date Collected: 12/4/2014 9:42:18 AM
Data Type: Original

Replicate Data: LCSWK1412945

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 4.793 | 4.793 | 0.232 | 0.805 | 0.234 | | | 09:42:34 | Yes |
| 2 | 4.831 | 4.831 | 0.234 | 0.813 | 0.236 | | | 09:43:08 | Yes |
| 3 | 4.802 | 4.802 | 0.233 | 0.817 | 0.235 | | | 09:43:42 | Yes |
| Mean: | 4.808 | 4.808 | 0.233 | | | | | | |
| SD: | 0.0197 | 0.0197 | 0.0010 | | | | | | |
| %RSD: | 0.4106 | 0.4106 | 0.41 | | | | | | |

Sequence No.: 14
Sample ID: K1412945-001
Analyst:

Autosampler Location: 11
Date Collected: 12/4/2014 9:44:31 AM
Data Type: Original

Replicate Data: K1412945-001

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.617 | 1.617 | 0.078 | 0.278 | 0.081 | | | 09:44:49 | Yes |
| 2 | 1.594 | 1.594 | 0.077 | 0.271 | 0.079 | | | 09:45:23 | Yes |
| 3 | 1.571 | 1.571 | 0.076 | 0.268 | 0.078 | | | 09:46:01 | Yes |
| Mean: | 1.594 | 1.594 | 0.077 | | | | | | |
| SD: | 0.0233 | 0.0233 | 0.0011 | | | | | | |
| %RSD: | 1.464 | 1.464 | 1.46 | | | | | | |

Sequence No.: 15
Sample ID: K1412945-001A
Analyst:

Autosampler Location: 12
Date Collected: 12/4/2014 9:46:55 AM
Data Type: Original

Replicate Data: K1412945-001A

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 6.289 | 6.289 | 0.305 | 1.067 | 0.307 | | | 09:47:14 | Yes |
| 2 | 6.303 | 6.303 | 0.305 | 1.065 | 0.308 | | | 09:47:49 | Yes |
| 3 | 6.312 | 6.312 | 0.306 | 1.084 | 0.308 | | | 09:48:23 | Yes |
| Mean: | 6.301 | 6.301 | 0.305 | | | | | | |
| SD: | 0.0114 | 0.0114 | 0.0006 | | | | | | |
| %RSD: | 0.1809 | 0.1809 | 0.18 | | | | | | |

Sequence No.: 16
Sample ID: K1412945-002
Analyst:

Autosampler Location: 13
Date Collected: 12/4/2014 9:49:23 AM
Data Type: Original

Replicate Data: K1412945-002

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.987 | 1.987 | 0.096 | 0.342 | 0.099 | | | 09:49:41 | Yes |
| 2 | 1.958 | 1.958 | 0.095 | 0.327 | 0.097 | | | 09:50:15 | Yes |
| 3 | 1.940 | 1.940 | 0.094 | 0.327 | 0.096 | | | 09:50:49 | Yes |
| Mean: | 1.962 | 1.962 | 0.095 | | | | | | |
| SD: | 0.0240 | 0.0240 | 0.0012 | | | | | | |
| %RSD: | 1.222 | 1.222 | 1.22 | | | | | | |

Sequence No.: 17
Sample ID: K1412945-003
Analyst:

Autosampler Location: 14
Date Collected: 12/4/2014 9:51:40 AM
Data Type: Original

Replicate Data: K1412945-003

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.280 | 2.280 | 0.110 | 0.392 | 0.113 | | | 09:51:58 | Yes |
| 2 | 2.330 | 2.330 | 0.113 | 0.391 | 0.115 | | | 09:52:32 | Yes |
| 3 | 2.322 | 2.322 | 0.113 | 0.382 | 0.115 | | | 09:53:06 | Yes |
| Mean: | 2.311 | 2.311 | 0.112 | | | | | | |
| SD: | 0.0272 | 0.0272 | 0.0013 | | | | | | |
| %RSD: | 1.178 | 1.178 | 1.18 | | | | | | |

Sequence No.: 18
Sample ID: K1412945-004
Analyst:

Autosampler Location: 15
Date Collected: 12/4/2014 9:53:57 AM
Data Type: Original

Replicate Data: K1412945-004

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.892 | 2.892 | 0.140 | 0.490 | 0.142 | | | 09:54:16 | Yes |
| 2 | 2.906 | 2.906 | 0.141 | 0.492 | 0.143 | | | 09:54:50 | Yes |
| 3 | 2.970 | 2.970 | 0.144 | 0.504 | 0.146 | | | 09:55:24 | Yes |
| Mean: | 2.923 | 2.923 | 0.142 | | | | | | |
| SD: | 0.0414 | 0.0414 | 0.0020 | | | | | | |
| %RSD: | 1.417 | 1.417 | 1.42 | | | | | | |

Sequence No.: 19
Sample ID: K1412945-005
Analyst:

Autosampler Location: 16
Date Collected: 12/4/2014 9:56:15 AM
Data Type: Original

Replicate Data: K1412945-005

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.628 | 1.628 | 0.079 | 0.281 | 0.081 | | | 09:56:35 | Yes |
| 2 | 1.583 | 1.583 | 0.077 | 0.268 | 0.079 | | | 09:57:08 | Yes |
| 3 | 1.536 | 1.536 | 0.074 | 0.265 | 0.077 | | | 09:57:42 | Yes |
| Mean: | 1.582 | 1.582 | 0.077 | | | | | | |
| SD: | 0.0456 | 0.0456 | 0.0022 | | | | | | |
| %RSD: | 2.884 | 2.884 | 2.88 | | | | | | |

Sequence No.: 20
Sample ID: K1412945-006
Analyst:

Autosampler Location: 17
Date Collected: 12/4/2014 9:58:34 AM
Data Type: Original

Replicate Data: K1412945-006

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 3.225 | 3.225 | 0.156 | 0.548 | 0.158 | | | 09:58:50 | Yes |
| 2 | 3.247 | 3.247 | 0.157 | 0.551 | 0.160 | | | 09:59:24 | Yes |
| 3 | 3.216 | 3.216 | 0.156 | 0.552 | 0.158 | | | 09:59:57 | Yes |
| Mean: | 3.229 | 3.229 | 0.157 | | | | | | |
| SD: | 0.0160 | 0.0160 | 0.0008 | | | | | | |
| %RSD: | 0.4968 | 0.4968 | 0.50 | | | | | | |

Sequence No.: 21
Sample ID: K1412945-007
Analyst:

Autosampler Location: 18
Date Collected: 12/4/2014 10:00:46 AM
Data Type: Original

Replicate Data: K1412945-007

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0357 | 0.0357 | 0.002 | 0.009 | 0.004 | | | 10:01:02 | Yes |
| 2 | 0.0301 | 0.0301 | 0.001 | 0.018 | 0.004 | | | 10:01:36 | Yes |
| 3 | -0.0039 | -0.0039 | -0.000 | -0.003 | 0.002 | | | 10:02:09 | Yes |
| Mean: | 0.0206 | 0.0206 | 0.001 | | | | | | |
| SD: | 0.0214 | 0.0214 | 0.0010 | | | | | | |
| %RSD: | 104.0 | 104.0 | 103.96 | | | | | | |

Sequence No.: 22

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 10:02:58 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.119 | 7.119 | 0.345 | 1.201 | 0.347 | | | 10:03:16 | Yes |
| 2 | 7.114 | 7.114 | 0.345 | 1.210 | 0.347 | | | 10:03:50 | Yes |
| 3 | 7.151 | 7.151 | 0.347 | 1.207 | 0.349 | | | 10:04:23 | Yes |
| Mean: | 7.128 | 7.128 | 0.345 | | | | | | |
| SD: | 0.0200 | 0.0200 | 0.0010 | | | | | | |
| %RSD: | 0.2799 | 0.2799 | 0.28 | | | | | | |

QC value within limits for As 193.70 Recovery = 95.04%

All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 10:05:14 AM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1003 | 0.1003 | 0.005 | 0.029 | 0.007 | | | 10:05:30 | Yes |
| 2 | 0.0467 | 0.0467 | 0.002 | 0.015 | 0.004 | | | 10:06:04 | Yes |
| 3 | 0.0273 | 0.0273 | 0.001 | 0.009 | 0.004 | | | 10:06:37 | Yes |
| Mean: | 0.0581 | 0.0581 | 0.003 | | | | | | |
| SD: | 0.0378 | 0.0378 | 0.0018 | | | | | | |
| %RSD: | 65.13 | 65.13 | 65.13 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 19

Sample ID: K1412945-008

Date Collected: 12/4/2014 10:07:26 AM

Analyst:

Data Type: Original

Replicate Data: K1412945-008

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 3.079 | 3.079 | 0.149 | 0.530 | 0.151 | | | 10:07:42 | Yes |
| 2 | 3.073 | 3.073 | 0.149 | 0.520 | 0.151 | | | 10:08:16 | Yes |
| 3 | 3.109 | 3.109 | 0.151 | 0.533 | 0.153 | | | 10:08:50 | Yes |
| Mean: | 3.087 | 3.087 | 0.150 | | | | | | |
| SD: | 0.0189 | 0.0189 | 0.0009 | | | | | | |
| %RSD: | 0.6137 | 0.6137 | 0.61 | | | | | | |

Sequence No.: 25

Autosampler Location: 20

Sample ID: K1412945-001DISS

Date Collected: 12/4/2014 10:09:38 AM

Analyst:

Data Type: Original

Replicate Data: K1412945-001DISS

| Repl | SampleConc | StndConc | BlncCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|----------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | -0.2665 | -0.2665 | -0.013 | -0.664 | -0.011 | | | 10:09:55 | Yes |
| 2 | -0.0287 | -0.0287 | -0.001 | -0.050 | 0.001 | | | 10:10:29 | Yes |
| 3 | -0.1965 | -0.1965 | -0.010 | -0.191 | -0.007 | | | 10:11:02 | Yes |

Changing BOC

Mean: -0.1639 -0.1639 -0.008

SD: 0.1222 0.1222 0.0059

%RSD: 74.55 74.55 74.55

Changing BOC

Sequence No.: 26

Sample ID: K1412945-002DISS

Analyst:

Autosampler Location: 21

Date Collected: 12/4/2014 10:11:51 AM

Data Type: Original

Replicate Data: K1412945-002DISS

| Repl | SampleConc | StndConc | BlncCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|----------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.578 | 1.578 | 0.076 | 0.241 | 0.079 | | | 10:12:08 | Yes |
| 2 | 1.538 | 1.538 | 0.075 | 0.248 | 0.077 | | | 10:12:42 | Yes |
| 3 | 1.528 | 1.528 | 0.074 | 0.216 | 0.076 | | | 10:13:16 | Yes |

Mean: 1.548 1.548 0.075

SD: 0.0261 0.0261 0.0013

%RSD: 1.688 1.688 1.69

Sequence No.: 27

Sample ID: K1412945-003DISS

Analyst:

Autosampler Location: 22

Date Collected: 12/4/2014 10:14:05 AM

Data Type: Original

Replicate Data: K1412945-003DISS

| Repl | SampleConc | StndConc | BlncCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|----------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.121 | 2.121 | 0.103 | 0.362 | 0.105 | | | 10:14:23 | Yes |
| 2 | 2.112 | 2.112 | 0.102 | 0.358 | 0.105 | | | 10:14:56 | Yes |
| 3 | 2.204 | 2.204 | 0.107 | 0.369 | 0.109 | | | 10:15:30 | Yes |

Mean: 2.146 2.146 0.104

SD: 0.0504 0.0504 0.0024

%RSD: 2.350 2.350 2.35

Sequence No.: 28

Sample ID: K1412945-004DISS

Analyst:

Autosampler Location: 23

Date Collected: 12/4/2014 10:16:18 AM

Data Type: Original

Replicate Data: K1412945-004DISS

| Repl | SampleConc | StndConc | BlncCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|----------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.623 | 2.623 | 0.127 | 0.445 | 0.129 | | | 10:16:36 | Yes |
| 2 | 2.639 | 2.639 | 0.128 | 0.439 | 0.130 | | | 10:17:10 | Yes |
| 3 | 2.519 | 2.519 | 0.122 | 0.411 | 0.124 | | | 10:17:43 | Yes |

Mean: 2.594 2.594 0.126

SD: 0.0652 0.0652 0.0032

%RSD: 2.512 2.512 2.51

Sequence No.: 29

Sample ID: K1412945-005DISS

Analyst:

Autosampler Location: 24

Date Collected: 12/4/2014 10:18:33 AM

Data Type: Original

Replicate Data: K1412945-005DISS

| Repl | SampleConc | StndConc | BlncCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|----------|------|------|-------|-------|------|------|
|------|------------|----------|----------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|-------|--------|--------|--------|-------|--------|------|----------|--------|
| 1 | 1.241 | 1.241 | 0.060 | 0.206 | 0.062 | | 10:18:51 | Yes |
| 2 | 1.101 | 1.101 | 0.053 | 0.124 | 0.056 | | 10:19:25 | Yes |
| 3 | 1.143 | 1.143 | 0.055 | 0.189 | 0.058 | | 10:19:58 | Yes |
| Mean: | 1.162 | 1.162 | 0.056 | | | | | |
| SD: | 0.0717 | 0.0717 | 0.0035 | | | | | |
| %RSD: | 6.174 | 6.174 | 6.17 | | | | | |

Sequence No.: 30

Sample ID: K1412945-006DISS

Analyst:

Autosampler Location: 25

Date Collected: 12/4/2014 10:20:48 AM

Data Type: Original

Replicate Data: K1412945-006DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.844 | 2.844 | 0.138 | 0.480 | 0.140 | | | 10:21:06 | Yes |
| 2 | 2.900 | 2.900 | 0.141 | 0.478 | 0.143 | | | 10:21:40 | Yes |
| 3 | 2.826 | 2.826 | 0.137 | 0.432 | 0.139 | | | 10:22:14 | Yes |
| Mean: | 2.857 | 2.857 | 0.138 | | | | | | |
| SD: | 0.0387 | 0.0387 | 0.0019 | | | | | | |
| %RSD: | 1.355 | 1.355 | 1.36 | | | | | | |

Sequence No.: 31

Sample ID: K1412945-007DISS

Analyst:

Autosampler Location: 26

Date Collected: 12/4/2014 10:23:04 AM

Data Type: Original

Replicate Data: K1412945-007DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1212 | 0.1212 | 0.006 | 0.018 | 0.008 | | | 10:23:22 | Yes |
| 2 | 0.0763 | 0.0763 | 0.004 | 0.003 | 0.006 | | | 10:23:56 | Yes |
| 3 | 0.0611 | 0.0611 | 0.003 | 0.011 | 0.005 | | | 10:24:29 | Yes |
| Mean: | 0.0862 | 0.0862 | 0.004 | | | | | | |
| SD: | 0.0312 | 0.0312 | 0.0015 | | | | | | |
| %RSD: | 36.20 | 36.20 | 36.20 | | | | | | |

Sequence No.: 32

Sample ID: K1412945-008DISS

Analyst:

Autosampler Location: 27

Date Collected: 12/4/2014 10:25:20 AM

Data Type: Original

Replicate Data: K1412945-008DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 3.348 | 3.348 | 0.162 | 0.575 | 0.164 | | | 10:25:38 | Yes |
| 2 | 3.433 | 3.433 | 0.166 | 0.574 | 0.169 | | | 10:26:12 | Yes |
| 3 | 3.414 | 3.414 | 0.165 | 0.588 | 0.168 | | | 10:26:45 | Yes |
| Mean: | 3.398 | 3.398 | 0.165 | | | | | | |
| SD: | 0.0446 | 0.0446 | 0.0022 | | | | | | |
| %RSD: | 1.313 | 1.313 | 1.31 | | | | | | |

Sequence No.: 33

Sample ID: K1412993-001

Analyst:

Autosampler Location: 28

Date Collected: 12/4/2014 10:27:36 AM

Data Type: Original

Replicate Data: K1412993-001

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.392 | 2.392 | 0.116 | 0.417 | 0.118 | | | 10:27:54 | Yes |
| 2 | 2.392 | 2.392 | 0.116 | 0.405 | 0.118 | | | 10:28:28 | Yes |
| 3 | 2.426 | 2.426 | 0.118 | 0.413 | 0.120 | | | 10:29:01 | Yes |
| Mean: | 2.403 | 2.403 | 0.116 | | | | | | |

SD: 0.0198 0.0198 0.0010
%RSD: 0.8231 0.8231 0.82

Sequence No.: 34

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 10:29:52 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.093 | 7.093 | 0.344 | 1.196 | 0.346 | | | 10:30:11 | Yes |
| 2 | 7.047 | 7.047 | 0.342 | 1.195 | 0.344 | | | 10:30:44 | Yes |
| 3 | 6.918 | 6.918 | 0.335 | 1.199 | 0.337 | | | 10:31:18 | Yes |
| Mean: | 7.019 | 7.019 | 0.340 | | | | | | |
| SD: | 0.0909 | 0.0909 | 0.0044 | | | | | | |
| %RSD: | 1.294 | 1.294 | 1.29 | | | | | | |

QC value within limits for As 193.70 Recovery = 93.59%

All analyte(s) passed QC.

Sequence No.: 35

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 10:32:08 AM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0913 | 0.0913 | 0.004 | 0.023 | 0.007 | | | 10:32:24 | Yes |
| 2 | 0.0315 | 0.0315 | 0.002 | -0.012 | 0.004 | | | 10:32:58 | Yes |
| 3 | 0.0498 | 0.0498 | 0.002 | 0.012 | 0.005 | | | 10:33:32 | Yes |
| Mean: | 0.0575 | 0.0575 | 0.003 | | | | | | |
| SD: | 0.0307 | 0.0307 | 0.0015 | | | | | | |
| %RSD: | 53.32 | 53.32 | 53.32 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 36

Autosampler Location: 29

Sample ID: K1412993-001D

Date Collected: 12/4/2014 10:34:20 AM

Analyst:

Data Type: Original

Replicate Data: K1412993-001D

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.315 | 2.315 | 0.112 | 0.400 | 0.114 | | | 10:34:39 | Yes |
| 2 | 2.311 | 2.311 | 0.112 | 0.369 | 0.114 | | | 10:35:13 | Yes |
| 3 | 2.358 | 2.358 | 0.114 | 0.403 | 0.116 | | | 10:35:47 | Yes |
| Mean: | 2.328 | 2.328 | 0.113 | | | | | | |
| SD: | 0.0260 | 0.0260 | 0.0013 | | | | | | |
| %RSD: | 1.116 | 1.116 | 1.12 | | | | | | |

Sequence No.: 37

Autosampler Location: 30

Sample ID: K1412993-001S

Date Collected: 12/4/2014 10:36:37 AM

Analyst:

Data Type: Original

Replicate Data: K1412993-001S

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.312 | 2.312 | 0.112 | 0.404 | 0.114 | | | 10:36:57 | Yes |
| 2 | 2.332 | 2.332 | 0.113 | 0.404 | 0.115 | | | 10:37:30 | Yes |
| 3 | 2.356 | 2.356 | 0.114 | 0.398 | 0.116 | | | 10:38:04 | Yes |
| Mean: | 2.333 | 2.333 | 0.113 | | | | | | |
| SD: | 0.0222 | 0.0222 | 0.0011 | | | | | | |

%RSD: 0.9520 0.9520 0.95

Sequence No.: 38
Sample ID: K1412993-002
Analyst:

Autosampler Location: 31
Date Collected: 12/4/2014 10:38:55 AM
Data Type: Original

Replicate Data: K1412993-002

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.380 | 2.380 | 0.115 | 0.417 | 0.118 | | | 10:39:14 | Yes |
| 2 | 2.434 | 2.434 | 0.118 | 0.408 | 0.120 | | | 10:39:48 | Yes |
| 3 | 2.364 | 2.364 | 0.115 | 0.395 | 0.117 | | | 10:40:22 | Yes |
| Mean: | 2.393 | 2.393 | 0.116 | | | | | | |
| SD: | 0.0368 | 0.0368 | 0.0018 | | | | | | |
| %RSD: | 1.536 | 1.536 | 1.54 | | | | | | |

Sequence No.: 39
Sample ID: K1412993-001DISS
Analyst:

Autosampler Location: 32
Date Collected: 12/4/2014 10:41:14 AM
Data Type: Original

Replicate Data: K1412993-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.330 | 2.330 | 0.113 | 0.413 | 0.115 | | | 10:41:29 | Yes |
| 2 | 2.354 | 2.354 | 0.114 | 0.403 | 0.116 | | | 10:42:03 | Yes |
| 3 | 2.302 | 2.302 | 0.112 | 0.373 | 0.114 | | | 10:42:37 | Yes |
| Mean: | 2.329 | 2.329 | 0.113 | | | | | | |
| SD: | 0.0258 | 0.0258 | 0.0013 | | | | | | |
| %RSD: | 1.108 | 1.108 | 1.11 | | | | | | |

Sequence No.: 40
Sample ID: K1412993-001DDISS
Analyst:

Autosampler Location: 33
Date Collected: 12/4/2014 10:43:24 AM
Data Type: Original

Replicate Data: K1412993-001DDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.091 | 2.091 | 0.101 | 0.349 | 0.104 | | | 10:43:40 | Yes |
| 2 | 2.134 | 2.134 | 0.103 | 0.365 | 0.106 | | | 10:44:14 | Yes |
| 3 | 2.161 | 2.161 | 0.105 | 0.377 | 0.107 | | | 10:44:47 | Yes |
| Mean: | 2.129 | 2.129 | 0.103 | | | | | | |
| SD: | 0.0357 | 0.0357 | 0.0017 | | | | | | |
| %RSD: | 1.679 | 1.679 | 1.68 | | | | | | |

Sequence No.: 41
Sample ID: K1412993-001SDISS
Analyst:

Autosampler Location: 34
Date Collected: 12/4/2014 10:45:35 AM
Data Type: Original

Replicate Data: K1412993-001SDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.216 | 2.216 | 0.107 | 0.389 | 0.110 | | | 10:45:51 | Yes |
| 2 | 2.248 | 2.248 | 0.109 | 0.386 | 0.111 | | | 10:46:25 | Yes |
| 3 | 2.214 | 2.214 | 0.107 | 0.386 | 0.109 | | | 10:46:59 | Yes |
| Mean: | 2.226 | 2.226 | 0.108 | | | | | | |
| SD: | 0.0195 | 0.0195 | 0.0009 | | | | | | |
| %RSD: | 0.8746 | 0.8746 | 0.87 | | | | | | |

Sequence No.: 42
Sample ID: K1412993-002DISS

Autosampler Location: 35
Date Collected: 12/4/2014 10:47:47 AM

Analyst:

Data Type: Original

Replicate Data: K1412993-002DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 4.020 | 4.020 | 0.195 | 0.936 | 0.197 | | | 10:48:03 | Yes |
| 2 | 2.211 | 2.211 | 0.107 | 0.363 | 0.109 | | | 10:48:37 | Yes |
| 3 | 2.215 | 2.215 | 0.107 | 0.372 | 0.110 | | | 10:49:11 | Yes |
| Mean: | 2.815 | 2.815 | 0.136 | | | | | | |
| SD: | 1.043 | 1.043 | 0.0506 | | | | | | |
| %RSD: | 37.06 | 37.06 | 37.06 | | | | | | |

Sequence No.: 43

Autosampler Location: 36

Sample ID: K1413402-MB

Date Collected: 12/4/2014 10:49:59 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-MB

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0232 | 0.0232 | 0.001 | -0.006 | 0.003 | | | 10:50:16 | Yes |
| 2 | 0.0338 | 0.0338 | 0.002 | 0.011 | 0.004 | | | 10:50:50 | Yes |
| 3 | -0.0056 | -0.0056 | -0.000 | -0.002 | 0.002 | | | 10:51:23 | Yes |
| Mean: | 0.0171 | 0.0171 | 0.001 | | | | | | |
| SD: | 0.0204 | 0.0204 | 0.0010 | | | | | | |
| %RSD: | 118.9 | 118.9 | 118.88 | | | | | | |

Sequence No.: 44

Autosampler Location: 37

Sample ID: LCSWK1413402

Date Collected: 12/4/2014 10:52:12 AM

Analyst:

Data Type: Original

Replicate Data: LCSWK1413402

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 4.841 | 4.841 | 0.235 | 0.847 | 0.237 | | | 10:52:29 | Yes |
| 2 | 4.895 | 4.895 | 0.237 | 0.848 | 0.239 | | | 10:53:03 | Yes |
| 3 | 4.924 | 4.924 | 0.239 | 0.853 | 0.241 | | | 10:53:37 | Yes |
| Mean: | 4.886 | 4.886 | 0.237 | | | | | | |
| SD: | 0.0420 | 0.0420 | 0.0020 | | | | | | |
| %RSD: | 0.8603 | 0.8603 | 0.86 | | | | | | |

Sequence No.: 45

Autosampler Location: 38

Sample ID: K1413402-001

Date Collected: 12/4/2014 10:54:26 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-001

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.140 | 2.140 | 0.104 | 0.374 | 0.106 | | | 10:54:43 | Yes |
| 2 | 2.104 | 2.104 | 0.102 | 0.368 | 0.104 | | | 10:55:17 | Yes |
| 3 | 2.119 | 2.119 | 0.103 | 0.362 | 0.105 | | | 10:55:51 | Yes |
| Mean: | 2.121 | 2.121 | 0.103 | | | | | | |
| SD: | 0.0179 | 0.0179 | 0.0009 | | | | | | |
| %RSD: | 0.8430 | 0.8430 | 0.84 | | | | | | |

Sequence No.: 46

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 10:56:40 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|---------|------|------|-------|-------|------|------|
|------|------------|----------|---------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|-------|--------|--------|--------|-------|--------|------|----------|--------|
| 1 | 7.691 | 7.691 | 0.373 | 1.338 | 0.375 | | 10:56:58 | Yes |
| 2 | 7.784 | 7.784 | 0.377 | 1.341 | 0.379 | | 10:57:33 | Yes |
| 3 | 7.521 | 7.521 | 0.365 | 1.351 | 0.367 | | 10:58:06 | Yes |
| Mean: | 7.665 | 7.665 | 0.372 | | | | | |
| SD: | 0.1333 | 0.1333 | 0.0065 | | | | | |
| %RSD: | 1.739 | 1.739 | 1.74 | | | | | |

QC value within limits for As 193.70 Recovery = 102.20%
All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 10:58:57 AM

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1328 | 0.1328 | 0.006 | 0.035 | 0.009 | | | 10:59:13 | Yes |
| 2 | 0.0551 | 0.0551 | 0.003 | 0.006 | 0.005 | | | 10:59:47 | Yes |
| 3 | 0.0381 | 0.0381 | 0.002 | -0.005 | 0.004 | | | 11:00:21 | Yes |
| Mean: | 0.0754 | 0.0754 | 0.004 | | | | | | |
| SD: | 0.0505 | 0.0505 | 0.0024 | | | | | | |
| %RSD: | 66.99 | 66.99 | 66.99 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 48

Sample ID: K1413402-002

Analyst:

Autosampler Location: 39

Date Collected: 12/4/2014 11:01:10 AM

Data Type: Original

Replicate Data: K1413402-002

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.884 | 2.884 | 0.140 | 0.505 | 0.142 | | | 11:01:27 | Yes |
| 2 | 2.835 | 2.835 | 0.137 | 0.489 | 0.140 | | | 11:02:01 | Yes |
| 3 | 2.897 | 2.897 | 0.140 | 0.501 | 0.143 | | | 11:02:35 | Yes |
| Mean: | 2.872 | 2.872 | 0.139 | | | | | | |
| SD: | 0.0326 | 0.0326 | 0.0016 | | | | | | |
| %RSD: | 1.135 | 1.135 | 1.13 | | | | | | |

Sequence No.: 49

Sample ID: K1413402-002D

Analyst:

Autosampler Location: 40

Date Collected: 12/4/2014 11:03:25 AM

Data Type: Original

Replicate Data: K1413402-002D

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|--------------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.821 | 2.821 | 0.137 | 0.492 | 0.139 | | | 11:03:42 | Yes |
| 2 | 3.164 | 3.164 | 0.153 | 1.366 | 0.156 | | | 11:04:16 | Yes |
| 3 | 2.448 | 2.448 | 0.119 | 0.152 | 0.121 | | | 11:04:50 | Yes |
| Changing BOC | | | | | | | | | |
| Mean: | 2.811 | 2.811 | 0.136 | | | | | | |
| SD: | 0.3582 | 0.3582 | 0.0174 | | | | | | |
| %RSD: | 12.74 | 12.74 | 12.74 | | | | | | |

Changing BOC

Sequence No.: 50

Sample ID: K1413402-002S

Analyst:

Autosampler Location: 41

Date Collected: 12/4/2014 11:05:39 AM

Data Type: Original

Replicate Data: K1413402-002S

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 3.514 | 3.514 | 0.170 | 0.593 | 0.172 | | | 11:05:57 | Yes |
| 2 | 3.473 | 3.473 | 0.168 | 0.604 | 0.170 | | | 11:06:31 | Yes |
| 3 | 3.464 | 3.464 | 0.168 | 0.600 | 0.170 | | | 11:07:05 | Yes |
| Mean: | 3.483 | 3.483 | 0.169 | | | | | | |
| SD: | 0.0270 | 0.0270 | 0.0013 | | | | | | |
| %RSD: | 0.7737 | 0.7737 | 0.77 | | | | | | |

Sequence No.: 51
Sample ID: K1413402-003
Analyst:

Autosampler Location: 42
Date Collected: 12/4/2014 11:07:55 AM
Data Type: Original

Replicate Data: K1413402-003

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 2.109 | 2.109 | 0.102 | 0.346 | 0.104 | | | 11:08:13 | Yes |
| 2 | 2.127 | 2.127 | 0.103 | 0.365 | 0.105 | | | 11:08:46 | Yes |
| 3 | 2.122 | 2.122 | 0.103 | 0.366 | 0.105 | | | 11:09:20 | Yes |
| Mean: | 2.119 | 2.119 | 0.103 | | | | | | |
| SD: | 0.0092 | 0.0092 | 0.0004 | | | | | | |
| %RSD: | 0.4347 | 0.4347 | 0.43 | | | | | | |

Sequence No.: 52
Sample ID: K1413402-004
Analyst:

Autosampler Location: 43
Date Collected: 12/4/2014 11:10:10 AM
Data Type: Original

Replicate Data: K1413402-004

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.1334 | 0.1334 | 0.006 | 0.028 | 0.009 | | | 11:10:29 | Yes |
| 2 | 0.1109 | 0.1109 | 0.005 | 0.019 | 0.008 | | | 11:11:02 | Yes |
| 3 | 0.1011 | 0.1011 | 0.005 | 0.014 | 0.007 | | | 11:11:36 | Yes |
| Mean: | 0.1151 | 0.1151 | 0.006 | | | | | | |
| SD: | 0.0166 | 0.0166 | 0.0008 | | | | | | |
| %RSD: | 14.38 | 14.38 | 14.38 | | | | | | |

Sequence No.: 53
Sample ID: K1413402-004A
Analyst:

Autosampler Location: 44
Date Collected: 12/4/2014 11:12:26 AM
Data Type: Original

Replicate Data: K1413402-004A

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 4.856 | 4.856 | 0.235 | 0.841 | 0.238 | | | 11:12:44 | Yes |
| 2 | 4.808 | 4.808 | 0.233 | 0.841 | 0.235 | | | 11:13:18 | Yes |
| 3 | 4.841 | 4.841 | 0.235 | 0.854 | 0.237 | | | 11:13:53 | Yes |
| Mean: | 4.835 | 4.835 | 0.234 | | | | | | |
| SD: | 0.0245 | 0.0245 | 0.0012 | | | | | | |
| %RSD: | 0.5072 | 0.5072 | 0.51 | | | | | | |

Sequence No.: 54
Sample ID: K1413402-005
Analyst:

Autosampler Location: 45
Date Collected: 12/4/2014 11:14:43 AM
Data Type: Original

Replicate Data: K1413402-005

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.694 | 1.694 | 0.082 | 0.308 | 0.084 | | | 11:15:02 | Yes |
| 2 | 1.668 | 1.668 | 0.081 | 0.295 | 0.083 | | | 11:15:36 | Yes |
| 3 | 1.641 | 1.641 | 0.080 | 0.294 | 0.082 | | | 11:16:10 | Yes |

Mean: 1.668 1.668 0.081
SD: 0.0266 0.0266 0.0013
%RSD: 1.596 1.596 1.60

Sequence No.: 55
Sample ID: K1413402-006
Analyst:

Autosampler Location: 46
Date Collected: 12/4/2014 11:17:00 AM
Data Type: Original

Replicate Data: K1413402-006

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.882 | 1.882 | 0.091 | 0.331 | 0.093 | | | 11:17:19 | Yes |
| 2 | 1.926 | 1.926 | 0.093 | 0.339 | 0.096 | | | 11:17:53 | Yes |
| 3 | 1.861 | 1.861 | 0.090 | 0.332 | 0.092 | | | 11:18:27 | Yes |
| Mean: | 1.889 | 1.889 | 0.092 | | | | | | |
| SD: | 0.0332 | 0.0332 | 0.0016 | | | | | | |
| %RSD: | 1.756 | 1.756 | 1.76 | | | | | | |

Sequence No.: 56
Sample ID: K1413402-007
Analyst:

Autosampler Location: 47
Date Collected: 12/4/2014 11:19:18 AM
Data Type: Original

Replicate Data: K1413402-007

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.982 | 1.982 | 0.096 | 0.337 | 0.098 | | | 11:19:37 | Yes |
| 2 | 1.980 | 1.980 | 0.096 | 0.350 | 0.098 | | | 11:20:11 | Yes |
| 3 | 1.926 | 1.926 | 0.093 | 0.347 | 0.096 | | | 11:20:44 | Yes |
| Mean: | 1.962 | 1.962 | 0.095 | | | | | | |
| SD: | 0.0318 | 0.0318 | 0.0015 | | | | | | |
| %RSD: | 1.621 | 1.621 | 1.62 | | | | | | |

Sequence No.: 57
Sample ID: K1413402-008
Analyst:

Autosampler Location: 48
Date Collected: 12/4/2014 11:21:36 AM
Data Type: Original

Replicate Data: K1413402-008

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 2.728 | 2.728 | 0.132 | 0.471 | 0.134 | | | 11:21:51 | Yes |
| 2 | 2.690 | 2.690 | 0.130 | 0.467 | 0.133 | | | 11:22:25 | Yes |
| 3 | 2.717 | 2.717 | 0.132 | 0.481 | 0.134 | | | 11:22:59 | Yes |
| Mean: | 2.711 | 2.711 | 0.131 | | | | | | |
| SD: | 0.0197 | 0.0197 | 0.0010 | | | | | | |
| %RSD: | 0.7278 | 0.7278 | 0.73 | | | | | | |

Sequence No.: 58
Sample ID: CCV
Analyst:

Autosampler Location: 5
Date Collected: 12/4/2014 11:23:46 AM
Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.536 | 7.536 | 0.365 | 1.351 | 0.367 | | | 11:24:04 | Yes |
| 2 | 8.075 | 8.075 | 0.391 | 1.615 | 0.394 | | | 11:24:38 | Yes |
| 3 | 7.569 | 7.569 | 0.367 | 1.268 | 0.369 | | | 11:25:12 | Yes |
| Mean: | 7.727 | 7.727 | 0.374 | | | | | | |
| SD: | 0.3022 | 0.3022 | 0.0146 | | | | | | |
| %RSD: | 3.911 | 3.911 | 3.91 | | | | | | |

QC value within limits for As 193.70 Recovery = 103.02%
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 11:26:02 AM

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1229 | 0.1229 | 0.006 | 0.025 | 0.008 | | | 11:26:18 | Yes |
| 2 | 0.0821 | 0.0821 | 0.004 | -0.007 | 0.006 | | | 11:26:52 | Yes |
| 3 | 0.0373 | 0.0373 | 0.002 | -0.004 | 0.004 | | | 11:27:26 | Yes |
| Mean: | 0.0808 | 0.0808 | 0.004 | | | | | | |
| SD: | 0.0428 | 0.0428 | 0.0021 | | | | | | |
| %RSD: | 52.98 | 52.98 | 52.98 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 60

Sample ID: K1413402-009

Analyst:

Autosampler Location: 49

Date Collected: 12/4/2014 11:28:14 AM

Data Type: Original

Replicate Data: K1413402-009

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1419 | 0.1419 | 0.007 | 0.084 | 0.009 | | | 11:28:30 | Yes |
| 2 | 0.1363 | 0.1363 | 0.007 | 0.028 | 0.009 | | | 11:29:04 | Yes |
| 3 | 0.1113 | 0.1113 | 0.005 | 0.026 | 0.008 | | | 11:29:38 | Yes |
| Mean: | 0.1298 | 0.1298 | 0.006 | | | | | | |
| SD: | 0.0163 | 0.0163 | 0.0008 | | | | | | |
| %RSD: | 12.53 | 12.53 | 12.53 | | | | | | |

Sequence No.: 61

Sample ID: K1413402-010

Analyst:

Autosampler Location: 50

Date Collected: 12/4/2014 11:30:26 AM

Data Type: Original

Replicate Data: K1413402-010

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.036 | 2.036 | 0.099 | 0.360 | 0.101 | | | 11:30:42 | Yes |
| 2 | 2.026 | 2.026 | 0.098 | 0.356 | 0.100 | | | 11:31:15 | Yes |
| 3 | 1.978 | 1.978 | 0.096 | 0.357 | 0.098 | | | 11:31:49 | Yes |
| Mean: | 2.013 | 2.013 | 0.098 | | | | | | |
| SD: | 0.0312 | 0.0312 | 0.0015 | | | | | | |
| %RSD: | 1.549 | 1.549 | 1.55 | | | | | | |

Sequence No.: 62

Sample ID: K1413402-001DISS

Analyst:

Autosampler Location: 51

Date Collected: 12/4/2014 11:32:37 AM

Data Type: Original

Replicate Data: K1413402-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.429 | 2.429 | 0.118 | 0.438 | 0.120 | | | 11:32:54 | Yes |
| 2 | 2.462 | 2.462 | 0.119 | 0.433 | 0.121 | | | 11:33:27 | Yes |
| 3 | 2.402 | 2.402 | 0.116 | 0.436 | 0.119 | | | 11:34:01 | Yes |
| Mean: | 2.431 | 2.431 | 0.118 | | | | | | |
| SD: | 0.0301 | 0.0301 | 0.0015 | | | | | | |
| %RSD: | 1.237 | 1.237 | 1.24 | | | | | | |

Sequence No.: 63

Autosampler Location: 52

Sample ID: K1413402-002DISS
Analyst:

Date Collected: 12/4/2014 11:34:50 AM
Data Type: Original

Replicate Data: K1413402-002DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.622 | 2.622 | 0.127 | 0.476 | 0.129 | | | 11:35:06 | Yes |
| 2 | 2.551 | 2.551 | 0.124 | 0.465 | 0.126 | | | 11:35:40 | Yes |
| 3 | 2.679 | 2.679 | 0.130 | 0.469 | 0.132 | | | 11:36:14 | Yes |
| Mean: | 2.617 | 2.617 | 0.127 | | | | | | |
| SD: | 0.0642 | 0.0642 | 0.0031 | | | | | | |
| %RSD: | 2.454 | 2.454 | 2.45 | | | | | | |

Sequence No.: 64
Sample ID: K1413402-002DDISS
Analyst:

Autosampler Location: 53
Date Collected: 12/4/2014 11:37:03 AM
Data Type: Original

Replicate Data: K1413402-002DDISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.803 | 2.803 | 0.136 | 0.454 | 0.138 | | | 11:37:19 | Yes |
| 2 | 2.714 | 2.714 | 0.132 | 0.489 | 0.134 | | | 11:37:53 | Yes |
| 3 | 2.741 | 2.741 | 0.133 | 0.481 | 0.135 | | | 11:38:26 | Yes |
| Mean: | 2.752 | 2.752 | 0.133 | | | | | | |
| SD: | 0.0455 | 0.0455 | 0.0022 | | | | | | |
| %RSD: | 1.653 | 1.653 | 1.65 | | | | | | |

Sequence No.: 65
Sample ID: K1413402-002SDISS
Analyst:

Autosampler Location: 54
Date Collected: 12/4/2014 11:39:15 AM
Data Type: Original

Replicate Data: K1413402-002SDISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 3.499 | 3.499 | 0.170 | 0.606 | 0.172 | | | 11:39:32 | Yes |
| 2 | 3.391 | 3.391 | 0.164 | 0.599 | 0.167 | | | 11:40:06 | Yes |
| 3 | 3.431 | 3.431 | 0.166 | 0.605 | 0.168 | | | 11:40:40 | Yes |
| Mean: | 3.440 | 3.440 | 0.167 | | | | | | |
| SD: | 0.0548 | 0.0548 | 0.0027 | | | | | | |
| %RSD: | 1.592 | 1.592 | 1.59 | | | | | | |

Sequence No.: 66
Sample ID: K1413402-003DISS
Analyst:

Autosampler Location: 55
Date Collected: 12/4/2014 11:41:29 AM
Data Type: Original

Replicate Data: K1413402-003DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.458 | 2.458 | 0.119 | 0.435 | 0.121 | | | 11:41:46 | Yes |
| 2 | 2.603 | 2.603 | 0.126 | 0.447 | 0.128 | | | 11:42:20 | Yes |
| 3 | 2.490 | 2.490 | 0.121 | 0.450 | 0.123 | | | 11:42:54 | Yes |
| Mean: | 2.517 | 2.517 | 0.122 | | | | | | |
| SD: | 0.0763 | 0.0763 | 0.0037 | | | | | | |
| %RSD: | 3.033 | 3.033 | 3.03 | | | | | | |

Sequence No.: 67
Sample ID: K1413402-004DISS
Analyst:

Autosampler Location: 56
Date Collected: 12/4/2014 11:43:43 AM
Data Type: Original

Replicate Data: K1413402-004DISS

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0977 | 0.0977 | 0.005 | 0.023 | 0.007 | | | 11:44:01 | Yes |
| 2 | 0.0908 | 0.0908 | 0.004 | 0.019 | 0.007 | | | 11:44:34 | Yes |
| 3 | 0.0932 | 0.0932 | 0.005 | 0.021 | 0.007 | | | 11:45:08 | Yes |
| Mean: | 0.0939 | 0.0939 | 0.005 | | | | | | |
| SD: | 0.0035 | 0.0035 | 0.0002 | | | | | | |
| %RSD: | 3.753 | 3.753 | 3.75 | | | | | | |

Sequence No.: 68

Autosampler Location: 57

Sample ID: K1413402-005DISS

Date Collected: 12/4/2014 11:45:57 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-005DISS

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.323 | 1.323 | 0.064 | 0.239 | 0.066 | | | 11:46:15 | Yes |
| 2 | 1.396 | 1.396 | 0.068 | 0.243 | 0.070 | | | 11:46:49 | Yes |
| 3 | 1.365 | 1.365 | 0.066 | 0.237 | 0.068 | | | 11:47:22 | Yes |
| Mean: | 1.361 | 1.361 | 0.066 | | | | | | |
| SD: | 0.0362 | 0.0362 | 0.0018 | | | | | | |
| %RSD: | 2.663 | 2.663 | 2.66 | | | | | | |

Sequence No.: 69

Autosampler Location: 58

Sample ID: K1413402-006DISS

Date Collected: 12/4/2014 11:48:12 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-006DISS

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 2.008 | 2.008 | 0.097 | 0.368 | 0.100 | | | 11:48:30 | Yes |
| 2 | 1.983 | 1.983 | 0.096 | 0.368 | 0.098 | | | 11:49:04 | Yes |
| 3 | 2.068 | 2.068 | 0.100 | 0.369 | 0.102 | | | 11:49:37 | Yes |
| Mean: | 2.020 | 2.020 | 0.098 | | | | | | |
| SD: | 0.0438 | 0.0438 | 0.0021 | | | | | | |
| %RSD: | 2.168 | 2.168 | 2.17 | | | | | | |

Sequence No.: 70

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 11:50:28 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.678 | 7.678 | 0.372 | 1.368 | 0.374 | | | 11:50:46 | Yes |
| 2 | 7.736 | 7.736 | 0.375 | 1.447 | 0.377 | | | 11:51:19 | Yes |
| 3 | 7.616 | 7.616 | 0.369 | 1.349 | 0.371 | | | 11:51:53 | Yes |
| Mean: | 7.677 | 7.677 | 0.372 | | | | | | |
| SD: | 0.0603 | 0.0603 | 0.0029 | | | | | | |
| %RSD: | 0.7857 | 0.7857 | 0.79 | | | | | | |

Changing BOC

QC value within limits for As 193.70 Recovery = 102.36%

All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 11:52:44 AM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|------|------|-------|-------|------|------|
|------|------------|---------|---------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|-------|--------|--------|--------|--------|--------|------|----------|--------|
| 1 | 0.1270 | 0.1270 | 0.006 | 0.010 | 0.008 | | 11:53:00 | Yes |
| 2 | 0.0590 | 0.0590 | 0.003 | -0.019 | 0.005 | | 11:53:34 | Yes |
| 3 | 0.0501 | 0.0501 | 0.002 | 0.010 | 0.005 | | 11:54:07 | Yes |
| Mean: | 0.0787 | 0.0787 | 0.004 | | | | | |
| SD: | 0.0421 | 0.0421 | 0.0020 | | | | | |
| %RSD: | 53.49 | 53.49 | 53.49 | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72 Autosampler Location: 59
Sample ID: K1413402-007DISS Date Collected: 12/4/2014 11:54:56 AM
Analyst: Data Type: Original

Replicate Data: K1413402-007DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.533 | 1.533 | 0.074 | 0.270 | 0.076 | | | 11:55:14 | Yes |
| 2 | 1.574 | 1.574 | 0.076 | 0.255 | 0.078 | | | 11:55:48 | Yes |
| 3 | 1.547 | 1.547 | 0.075 | 0.281 | 0.077 | | | 11:56:22 | Yes |
| Mean: | 1.552 | 1.552 | 0.075 | | | | | | |
| SD: | 0.0209 | 0.0209 | 0.0010 | | | | | | |
| %RSD: | 1.345 | 1.345 | 1.35 | | | | | | |

Sequence No.: 73 Autosampler Location: 60
Sample ID: K1413402-008DISS Date Collected: 12/4/2014 11:57:13 AM
Analyst: Data Type: Original

Replicate Data: K1413402-008DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.234 | 2.234 | 0.108 | 0.415 | 0.110 | | | 11:57:31 | Yes |
| 2 | 2.321 | 2.321 | 0.112 | 0.408 | 0.115 | | | 11:58:05 | Yes |
| 3 | 2.458 | 2.458 | 0.119 | 0.419 | 0.121 | | | 11:58:39 | Yes |
| Mean: | 2.338 | 2.338 | 0.113 | | | | | | |
| SD: | 0.1130 | 0.1130 | 0.0055 | | | | | | |
| %RSD: | 4.834 | 4.834 | 4.83 | | | | | | |

Sequence No.: 74 Autosampler Location: 61
Sample ID: K1413402-009DISS Date Collected: 12/4/2014 11:59:29 AM
Analyst: Data Type: Original

Replicate Data: K1413402-009DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1384 | 0.1384 | 0.007 | 0.027 | 0.009 | | | 11:59:48 | Yes |
| 2 | 0.1190 | 0.1190 | 0.006 | 0.021 | 0.008 | | | 12:00:21 | Yes |
| 3 | -0.0040 | -0.0040 | -0.000 | -0.072 | 0.002 | | | 12:00:55 | Yes |
| Mean: | 0.0844 | 0.0844 | 0.004 | | | | | | |
| SD: | 0.0772 | 0.0772 | 0.0037 | | | | | | |
| %RSD: | 91.45 | 91.45 | 91.45 | | | | | | |

Sequence No.: 75 Autosampler Location: 62
Sample ID: K1413402-010DISS Date Collected: 12/4/2014 12:01:46 PM
Analyst: Data Type: Original

Replicate Data: K1413402-010DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.531 | 1.531 | 0.074 | 0.275 | 0.076 | | | 12:02:05 | Yes |
| 2 | 1.544 | 1.544 | 0.075 | 0.241 | 0.077 | | | 12:02:39 | Yes |

| | | | | | | | |
|-------|--------|--------|--------|-------|-------|----------|-----|
| 3 | 1.566 | 1.566 | 0.076 | 0.237 | 0.078 | 12:03:13 | Yes |
| Mean: | 1.547 | 1.547 | 0.075 | | | | |
| SD: | 0.0180 | 0.0180 | 0.0009 | | | | |
| %RSD: | 1.166 | 1.166 | 1.17 | | | | |

Sequence No.: 76

Autosampler Location: 63

Sample ID: K1413380-MB

Date Collected: 12/4/2014 12:04:04 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-MB

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0243 | 0.0243 | 0.001 | 0.013 | 0.003 | | | 12:04:19 | Yes |
| 2 | 0.0094 | 0.0094 | 0.000 | -0.020 | 0.003 | | | 12:04:53 | Yes |
| 3 | -0.0007 | -0.0007 | -0.000 | -0.018 | 0.002 | | | 12:05:26 | Yes |
| Mean: | 0.0110 | 0.0110 | 0.001 | | | | | | |
| SD: | 0.0126 | 0.0126 | 0.0006 | | | | | | |
| %RSD: | 114.3 | 114.3 | 114.26 | | | | | | |

Sequence No.: 77

Autosampler Location: 64

Sample ID: LCSWK1413380

Date Collected: 12/4/2014 12:06:14 PM

Analyst:

Data Type: Original

Replicate Data: LCSWK1413380

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 4.927 | 4.927 | 0.239 | 0.858 | 0.241 | | | 12:06:29 | Yes |
| 2 | 4.799 | 4.799 | 0.233 | 0.868 | 0.235 | | | 12:07:04 | Yes |
| 3 | 5.039 | 5.039 | 0.244 | 0.875 | 0.246 | | | 12:07:37 | Yes |
| Mean: | 4.922 | 4.922 | 0.239 | | | | | | |
| SD: | 0.1204 | 0.1204 | 0.0058 | | | | | | |
| %RSD: | 2.446 | 2.446 | 2.45 | | | | | | |

Sequence No.: 78

Autosampler Location: 65

Sample ID: K1413380-001

Date Collected: 12/4/2014 12:08:25 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-001

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.2180 | 0.2180 | 0.011 | 0.040 | 0.013 | | | 12:08:41 | Yes |
| 2 | 0.2010 | 0.2010 | 0.010 | 0.037 | 0.012 | | | 12:09:15 | Yes |
| 3 | 0.1586 | 0.1586 | 0.008 | 0.031 | 0.010 | | | 12:09:48 | Yes |
| Mean: | 0.1925 | 0.1925 | 0.009 | | | | | | |
| SD: | 0.0306 | 0.0306 | 0.0015 | | | | | | |
| %RSD: | 15.89 | 15.89 | 15.89 | | | | | | |

Sequence No.: 79

Autosampler Location: 66

Sample ID: K1413380-002

Date Collected: 12/4/2014 12:10:37 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-002

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.776 | 1.776 | 0.086 | 0.318 | 0.088 | | | 12:10:53 | Yes |
| 2 | 1.752 | 1.752 | 0.085 | 0.310 | 0.087 | | | 12:11:26 | Yes |
| 3 | 1.762 | 1.762 | 0.085 | 0.325 | 0.088 | | | 12:12:00 | Yes |
| Mean: | 1.764 | 1.764 | 0.085 | | | | | | |
| SD: | 0.0120 | 0.0120 | 0.0006 | | | | | | |
| %RSD: | 0.6812 | 0.6812 | 0.68 | | | | | | |

Sequence No.: 80
Sample ID: K1413380-003
Analyst:

Autosampler Location: 67
Date Collected: 12/4/2014 12:12:48 PM
Data Type: Original

Replicate Data: K1413380-003

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.4854 | 0.4854 | 0.024 | 0.093 | 0.026 | | | 12:13:04 | Yes |
| 2 | 0.6730 | 0.6730 | 0.033 | 0.215 | 0.035 | | | 12:13:38 | Yes |
| Changing BOC | | | | | | | | | |
| 3 | 0.4661 | 0.4661 | 0.023 | 0.071 | 0.025 | | | 12:14:12 | Yes |
| Mean: | 0.5415 | 0.5415 | 0.026 | | | | | | |
| SD: | 0.1143 | 0.1143 | 0.0055 | | | | | | |
| %RSD: | 21.11 | 21.11 | 21.11 | | | | | | |
| Changing BOC | | | | | | | | | |

Sequence No.: 81
Sample ID: K1413380-003A
Analyst:

Autosampler Location: 68
Date Collected: 12/4/2014 12:15:00 PM
Data Type: Original

Replicate Data: K1413380-003A

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 5.166 | 5.166 | 0.250 | 0.913 | 0.253 | | | 12:15:17 | Yes |
| 2 | 5.292 | 5.292 | 0.256 | 0.906 | 0.259 | | | 12:15:51 | Yes |
| 3 | 5.122 | 5.122 | 0.248 | 0.855 | 0.250 | | | 12:16:27 | Yes |
| Mean: | 5.193 | 5.193 | 0.252 | | | | | | |
| SD: | 0.0883 | 0.0883 | 0.0043 | | | | | | |
| %RSD: | 1.700 | 1.700 | 1.70 | | | | | | |

Sequence No.: 82
Sample ID: CCV
Analyst:

Autosampler Location: 5
Date Collected: 12/4/2014 12:17:15 PM
Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.646 | 7.646 | 0.371 | 1.372 | 0.373 | | | 12:17:33 | Yes |
| 2 | 7.706 | 7.706 | 0.373 | 1.371 | 0.376 | | | 12:18:07 | Yes |
| 3 | 7.597 | 7.597 | 0.368 | 1.365 | 0.370 | | | 12:18:41 | Yes |
| Mean: | 7.650 | 7.650 | 0.371 | | | | | | |
| SD: | 0.0542 | 0.0542 | 0.0026 | | | | | | |
| %RSD: | 0.7086 | 0.7086 | 0.71 | | | | | | |

QC value within limits for As 193.70 Recovery = 101.99%
All analyte(s) passed QC.

Sequence No.: 83
Sample ID: CCB
Analyst:

Autosampler Location: 1
Date Collected: 12/4/2014 12:19:32 PM
Data Type: Original

Replicate Data: CCB

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.1469 | 0.1469 | 0.007 | 0.023 | 0.009 | | | 12:19:48 | Yes |
| 2 | 0.0955 | 0.0955 | 0.005 | 0.019 | 0.007 | | | 12:20:22 | Yes |
| 3 | 0.0436 | 0.0436 | 0.002 | 0.015 | 0.004 | | | 12:20:56 | Yes |
| Mean: | 0.0954 | 0.0954 | 0.005 | | | | | | |
| SD: | 0.0517 | 0.0517 | 0.0025 | | | | | | |
| %RSD: | 54.17 | 54.17 | 54.17 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84
Sample ID: K1413380-003D
Analyst:

Autosampler Location: 69
Date Collected: 12/4/2014 12:21:44 PM
Data Type: Original

Replicate Data: K1413380-003D

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.4783 | 0.4783 | 0.023 | 0.094 | 0.025 | | | 12:22:01 | Yes |
| 2 | 0.4613 | 0.4613 | 0.022 | 0.075 | 0.025 | | | 12:22:35 | Yes |
| 3 | 0.4781 | 0.4781 | 0.023 | 0.094 | 0.025 | | | 12:23:09 | Yes |
| Mean: | 0.4725 | 0.4725 | 0.023 | | | | | | |
| SD: | 0.0097 | 0.0097 | 0.0005 | | | | | | |
| %RSD: | 2.062 | 2.062 | 2.06 | | | | | | |

Sequence No.: 85
Sample ID: K1413380-003S
Analyst:

Autosampler Location: 70
Date Collected: 12/4/2014 12:23:57 PM
Data Type: Original

Replicate Data: K1413380-003S

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 8.462 | 8.462 | 0.410 | 1.502 | 0.412 | | | 12:24:14 | Yes |
| 2 | 8.545 | 8.545 | 0.414 | 1.841 | 0.416 | | | 12:24:48 | Yes |
| 3 | 8.592 | 8.592 | 0.416 | 1.511 | 0.419 | | | 12:25:22 | Yes |
| Mean: | 8.533 | 8.533 | 0.414 | | | | | | |
| SD: | 0.0661 | 0.0661 | 0.0032 | | | | | | |
| %RSD: | 0.7744 | 0.7744 | 0.77 | | | | | | |

Sequence No.: 86
Sample ID: K1413380-004
Analyst:

Autosampler Location: 71
Date Collected: 12/4/2014 12:26:11 PM
Data Type: Original

Replicate Data: K1413380-004

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.249 | 2.249 | 0.109 | 0.392 | 0.111 | | | 12:26:28 | Yes |
| 2 | 2.138 | 2.138 | 0.104 | 0.383 | 0.106 | | | 12:27:02 | Yes |
| 3 | 2.159 | 2.159 | 0.105 | 0.393 | 0.107 | | | 12:27:35 | Yes |
| Mean: | 2.182 | 2.182 | 0.106 | | | | | | |
| SD: | 0.0588 | 0.0588 | 0.0029 | | | | | | |
| %RSD: | 2.697 | 2.697 | 2.70 | | | | | | |

Sequence No.: 87
Sample ID: K1413380-005
Analyst:

Autosampler Location: 72
Date Collected: 12/4/2014 12:28:25 PM
Data Type: Original

Replicate Data: K1413380-005

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.200 | 2.200 | 0.107 | 0.383 | 0.109 | | | 12:28:42 | Yes |
| 2 | 2.113 | 2.113 | 0.102 | 0.381 | 0.105 | | | 12:29:16 | Yes |
| 3 | 2.148 | 2.148 | 0.104 | 0.389 | 0.106 | | | 12:29:50 | Yes |
| Mean: | 2.154 | 2.154 | 0.104 | | | | | | |
| SD: | 0.0437 | 0.0437 | 0.0021 | | | | | | |
| %RSD: | 2.030 | 2.030 | 2.03 | | | | | | |

Sequence No.: 88
Sample ID: K1413380-006
Analyst:

Autosampler Location: 73
Date Collected: 12/4/2014 12:30:39 PM
Data Type: Original

Replicate Data: K1413380-006

| Repl | SampleConc | StdndConc | BlndCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|-----------|----------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1112 | 0.1112 | 0.005 | 0.052 | 0.008 | | | 12:30:57 | Yes |
| 2 | 0.0110 | 0.0110 | 0.001 | -0.002 | 0.003 | | | 12:31:30 | Yes |
| 3 | 0.0187 | 0.0187 | 0.001 | 0.002 | 0.003 | | | 12:32:04 | Yes |
| Mean: | 0.0470 | 0.0470 | 0.002 | | | | | | |
| SD: | 0.0557 | 0.0557 | 0.0027 | | | | | | |
| %RSD: | 118.7 | 118.7 | 118.70 | | | | | | |

Sequence No.: 89

Autosampler Location: 74

Sample ID: K1413380-007

Date Collected: 12/4/2014 12:32:54 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-007

| Repl | SampleConc | StdndConc | BlndCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|-----------|----------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.957 | 1.957 | 0.095 | 0.357 | 0.097 | | | 12:33:12 | Yes |
| 2 | 2.003 | 2.003 | 0.097 | 0.358 | 0.099 | | | 12:33:46 | Yes |
| 3 | 1.971 | 1.971 | 0.096 | 0.357 | 0.098 | | | 12:34:19 | Yes |
| Mean: | 1.977 | 1.977 | 0.096 | | | | | | |
| SD: | 0.0236 | 0.0236 | 0.0011 | | | | | | |
| %RSD: | 1.193 | 1.193 | 1.19 | | | | | | |

Sequence No.: 90

Autosampler Location: 75

Sample ID: K1413380-001DISS

Date Collected: 12/4/2014 12:35:09 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-001DISS

| Repl | SampleConc | StdndConc | BlndCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|-----------|----------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1440 | 0.1440 | 0.007 | 0.038 | 0.009 | | | 12:35:28 | Yes |
| 2 | 0.1236 | 0.1236 | 0.006 | 0.023 | 0.008 | | | 12:36:01 | Yes |
| 3 | 0.1330 | 0.1330 | 0.006 | 0.035 | 0.009 | | | 12:36:35 | Yes |
| Mean: | 0.1335 | 0.1335 | 0.006 | | | | | | |
| SD: | 0.0102 | 0.0102 | 0.0005 | | | | | | |
| %RSD: | 7.650 | 7.650 | 7.65 | | | | | | |

Sequence No.: 91

Autosampler Location: 76

Sample ID: K1413380-002DISS

Date Collected: 12/4/2014 12:37:25 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-002DISS

| Repl | SampleConc | StdndConc | BlndCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|-----------|----------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.616 | 1.616 | 0.078 | 0.292 | 0.080 | | | 12:37:44 | Yes |
| 2 | 1.614 | 1.614 | 0.078 | 0.293 | 0.080 | | | 12:38:18 | Yes |
| 3 | 1.595 | 1.595 | 0.077 | 0.289 | 0.080 | | | 12:38:51 | Yes |
| Mean: | 1.608 | 1.608 | 0.078 | | | | | | |
| SD: | 0.0112 | 0.0112 | 0.0005 | | | | | | |
| %RSD: | 0.6985 | 0.6985 | 0.70 | | | | | | |

Sequence No.: 92

Autosampler Location: 77

Sample ID: K1413380-003DISS

Date Collected: 12/4/2014 12:39:42 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-003DISS

| Repl | SampleConc | StdndConc | BlndCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|-----------|----------|------|--------|-------|--------|------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |

| | | | | | | | |
|-------|--------|--------|--------|-------|-------|----------|-----|
| 1 | 0.4429 | 0.4429 | 0.021 | 0.082 | 0.024 | 12:40:01 | Yes |
| 2 | 0.4111 | 0.4111 | 0.020 | 0.089 | 0.022 | 12:40:35 | Yes |
| 3 | 0.4463 | 0.4463 | 0.022 | 0.081 | 0.024 | 12:41:09 | Yes |
| Mean: | 0.4334 | 0.4334 | 0.021 | | | | |
| SD: | 0.0194 | 0.0194 | 0.0009 | | | | |
| %RSD: | 4.485 | 4.485 | 4.49 | | | | |

Sequence No.: 93

Sample ID: K1413380-003DDISS

Analyst:

Autosampler Location: 78

Date Collected: 12/4/2014 12:42:00 PM

Data Type: Original

Replicate Data: K1413380-003DDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.3700 | 0.3700 | 0.018 | 0.044 | 0.020 | | | 12:42:15 | Yes |
| 2 | 0.3791 | 0.3791 | 0.018 | 0.066 | 0.021 | | | 12:42:49 | Yes |
| 3 | 0.4082 | 0.4082 | 0.020 | 0.067 | 0.022 | | | 12:43:23 | Yes |
| Mean: | 0.3858 | 0.3858 | 0.019 | | | | | | |
| SD: | 0.0200 | 0.0200 | 0.0010 | | | | | | |
| %RSD: | 5.173 | 5.173 | 5.17 | | | | | | |

Sequence No.: 94

Sample ID: CCV

Analyst:

Autosampler Location: 5

Date Collected: 12/4/2014 12:44:10 PM

Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.801 | 7.801 | 0.378 | 1.378 | 0.380 | | | 12:44:28 | Yes |
| 2 | 7.713 | 7.713 | 0.374 | 1.381 | 0.376 | | | 12:45:02 | Yes |
| 3 | 7.754 | 7.754 | 0.376 | 1.409 | 0.378 | | | 12:45:36 | Yes |
| Mean: | 7.756 | 7.756 | 0.376 | | | | | | |
| SD: | 0.0439 | 0.0439 | 0.0021 | | | | | | |
| %RSD: | 0.5664 | 0.5664 | 0.57 | | | | | | |

QC value within limits for As 193.70 Recovery = 103.41%
All analyte(s) passed QC.

Sequence No.: 95

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 12:46:35 PM

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1557 | 0.1557 | 0.008 | 0.035 | 0.010 | | | 12:46:51 | Yes |
| 2 | 0.0996 | 0.0996 | 0.005 | 0.013 | 0.007 | | | 12:47:25 | Yes |
| 3 | 0.0524 | 0.0524 | 0.003 | 0.011 | 0.005 | | | 12:47:59 | Yes |
| Mean: | 0.1026 | 0.1026 | 0.005 | | | | | | |
| SD: | 0.0517 | 0.0517 | 0.0025 | | | | | | |
| %RSD: | 50.42 | 50.42 | 50.42 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96

Sample ID: K1413380-003SDISS

Analyst:

Autosampler Location: 79

Date Collected: 12/4/2014 12:48:48 PM

Data Type: Original

Replicate Data: K1413380-003SDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.897 | 7.897 | 0.383 | 1.431 | 0.385 | | | 12:49:04 | Yes |

| | | | | | | | |
|-------|--------|--------|--------|-------|-------|----------|-----|
| 2 | 8.440 | 8.440 | 0.409 | 1.456 | 0.411 | 12:49:38 | Yes |
| 3 | 8.173 | 8.173 | 0.396 | 1.536 | 0.398 | 12:50:12 | Yes |
| Mean: | 8.170 | 8.170 | 0.396 | | | | |
| SD: | 0.2714 | 0.2714 | 0.0132 | | | | |
| %RSD: | 3.322 | 3.322 | 3.32 | | | | |

Sequence No.: 97

Autosampler Location: 80

Sample ID: K1413380-004DISS

Date Collected: 12/4/2014 12:51:00 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-004DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.236 | 2.236 | 0.108 | 0.416 | 0.111 | | | 12:51:15 | Yes |
| 2 | 2.232 | 2.232 | 0.108 | 0.416 | 0.110 | | | 12:51:49 | Yes |
| 3 | 2.247 | 2.247 | 0.109 | 0.394 | 0.111 | | | 12:52:23 | Yes |
| Mean: | 2.238 | 2.238 | 0.108 | | | | | | |
| SD: | 0.0076 | 0.0076 | 0.0004 | | | | | | |
| %RSD: | 0.3383 | 0.3383 | 0.34 | | | | | | |

Sequence No.: 98

Autosampler Location: 81

Sample ID: K1413380-005DISS

Date Collected: 12/4/2014 12:53:11 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-005DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.505 | 2.505 | 0.121 | 0.459 | 0.124 | | | 12:53:27 | Yes |
| 2 | 2.721 | 2.721 | 0.132 | 0.475 | 0.134 | | | 12:54:00 | Yes |
| 3 | 2.565 | 2.565 | 0.124 | 0.463 | 0.127 | | | 12:54:34 | Yes |
| Mean: | 2.597 | 2.597 | 0.126 | | | | | | |
| SD: | 0.1112 | 0.1112 | 0.0054 | | | | | | |
| %RSD: | 4.280 | 4.280 | 4.28 | | | | | | |

Sequence No.: 99

Autosampler Location: 82

Sample ID: K1413380-006DISS

Date Collected: 12/4/2014 12:55:22 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-006DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | -0.0008 | -0.0008 | -0.000 | -0.037 | 0.002 | | | 12:55:38 | Yes |
| 2 | 0.0333 | 0.0333 | 0.002 | 0.009 | 0.004 | | | 12:56:12 | Yes |
| 3 | 0.0235 | 0.0235 | 0.001 | 0.008 | 0.003 | | | 12:56:46 | Yes |
| Mean: | 0.0187 | 0.0187 | 0.001 | | | | | | |
| SD: | 0.0175 | 0.0175 | 0.0008 | | | | | | |
| %RSD: | 93.80 | 93.80 | 93.80 | | | | | | |

Sequence No.: 100

Autosampler Location: 83

Sample ID: K1413380-007DISS

Date Collected: 12/4/2014 12:57:34 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-007DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.815 | 1.815 | 0.088 | 0.337 | 0.090 | | | 12:57:51 | Yes |
| 2 | 1.819 | 1.819 | 0.088 | 0.335 | 0.090 | | | 12:58:24 | Yes |
| 3 | 1.790 | 1.790 | 0.087 | 0.323 | 0.089 | | | 12:58:59 | Yes |
| Mean: | 1.808 | 1.808 | 0.088 | | | | | | |
| SD: | 0.0160 | 0.0160 | 0.0008 | | | | | | |
| %RSD: | 0.8860 | 0.8860 | 0.89 | | | | | | |

Sequence No.: 101
Sample ID: K1412945-001DISS
Analyst:

Autosampler Location: 84
Date Collected: 12/4/2014 12:59:47 PM
Data Type: Original

Replicate Data: K1412945-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0367 | 0.0367 | 0.002 | 0.012 | 0.004 | | | 13:00:04 | Yes |
| 2 | 0.0265 | 0.0265 | 0.001 | 0.001 | 0.003 | | | 13:00:37 | Yes |
| 3 | 0.0114 | 0.0114 | 0.001 | 0.001 | 0.003 | | | 13:01:11 | Yes |
| Mean: | 0.0249 | 0.0249 | 0.001 | | | | | | |
| SD: | 0.0127 | 0.0127 | 0.0006 | | | | | | |
| %RSD: | 51.14 | 51.14 | 51.14 | | | | | | |

Sequence No.: 102
Sample ID: K1413380-003
Analyst:

Autosampler Location: 67
Date Collected: 12/4/2014 1:02:00 PM
Data Type: Original

Replicate Data: K1413380-003

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.4725 | 0.4725 | 0.023 | 0.089 | 0.025 | | | 13:02:16 | Yes |
| 2 | 0.3830 | 0.3830 | 0.019 | 0.016 | 0.021 | | | 13:02:50 | Yes |
| 3 | 0.4540 | 0.4540 | 0.022 | 0.045 | 0.024 | | | 13:03:25 | Yes |
| Mean: | 0.4365 | 0.4365 | 0.021 | | | | | | |
| SD: | 0.0473 | 0.0473 | 0.0023 | | | | | | |
| %RSD: | 10.83 | 10.83 | 10.83 | | | | | | |

User canceled analysis.

Analysis Begun

Logged In Analyst: ALKLS.ALKLSXP315
Spectrometer Model: AAnalyst 200, S/N 200S5061701

Technique: AA FIAS-Flame
Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif
Batch ID: 120414-As1
Results Data Set: 120414-As1
Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

Sequence No.: 103
Sample ID: K1412945-001DISS
Analyst:

Autosampler Location: 85
Date Collected: 12/4/2014 1:04:07 PM
Data Type: Original

Replicate Data: K1412945-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1638 | 0.1638 | 0.008 | 0.009 | 0.010 | | | 13:04:23 | Yes |
| 2 | 0.1749 | 0.1749 | 0.008 | -0.008 | 0.011 | | | 13:04:57 | Yes |
| 3 | 0.2071 | 0.2071 | 0.010 | 0.037 | 0.012 | | | 13:05:31 | Yes |
| Mean: | 0.1819 | 0.1819 | 0.009 | | | | | | |
| SD: | 0.0225 | 0.0225 | 0.0011 | | | | | | |
| %RSD: | 12.36 | 12.36 | 12.36 | | | | | | |

Sequence No.: 104
Sample ID: CCV
Analyst:

Autosampler Location: 5
Date Collected: 12/4/2014 1:06:20 PM
Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|------|------|-------|-------|------|------|
|------|------------|---------|---------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|--------------|--------|--------|--------|-------|--------|------|----------|--------|
| 1 | 7.953 | 7.953 | 0.385 | 1.477 | 0.388 | | 13:06:38 | Yes |
| 2 | 7.270 | 7.270 | 0.352 | 0.899 | 0.355 | | 13:07:12 | Yes |
| Changing BOC | | | | | | | | |
| 3 | 7.963 | 7.963 | 0.386 | 1.389 | 0.388 | | 13:07:46 | Yes |
| Mean: | 7.729 | 7.729 | 0.375 | | | | | |
| SD: | 0.3971 | 0.3971 | 0.0192 | | | | | |
| %RSD: | 5.138 | 5.138 | 5.14 | | | | | |

Changing BOC

QC value within limits for As 193.70 Recovery = 103.05%

All analyte(s) passed QC.

Sequence No.: 105

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 1:08:37 PM

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1444 | 0.1444 | 0.007 | 0.030 | 0.009 | | | 13:08:53 | Yes |
| 2 | 0.0089 | 0.0089 | 0.000 | -0.046 | 0.003 | | | 13:09:27 | Yes |
| 3 | 0.0622 | 0.0622 | 0.003 | 0.013 | 0.005 | | | 13:10:01 | Yes |
| Mean: | 0.0718 | 0.0718 | 0.003 | | | | | | |
| SD: | 0.0683 | 0.0683 | 0.0033 | | | | | | |
| %RSD: | 95.07 | 95.07 | 95.07 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T: 1-360-577-7222
F: 1-360-636-1068
www.alsglobal.com

December 33, 2014

Analytical Report for Service Request No: K1412993

Manu Anjmani
Arcadis
8725 Rosehill
Suite 350
Lenexa, KS 66215

RE: Armor Rd. KCMO/KC001649.0001

Dear Manu:

Enclosed are the results of the sample(s) submitted to our laboratory on November 18, 2014. For your reference, these analyses have been assigned our service request number **K1412993**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at gregory.salata@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Gregory Salata, Ph.D.
Client Services Manager

Page 1 of 67

Acronyms

| | |
|------------|--|
| ASTM | American Society for Testing and Materials |
| A2LA | American Association for Laboratory Accreditation |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MCL | Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| NA | Not Applicable |
| NC | Not Calculated |
| NCASI | National Council of the Paper Industry for Air and Stream Improvement |
| ND | Not Detected |
| NIOSH | National Institute for Occupational Safety and Health |
| PQL | Practical Quantitation Limit |
| RCRA | Resource Conservation and Recovery Act |
| SIM | Selected Ion Monitoring |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. |

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

| Agency | Web Site | Number |
|--------------------------|---|---------------|
| Alaska DEC UST | http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx | UST-040 |
| Arizona DHS | http://www.azdhs.gov/lab/license/env.htm | AZ0339 |
| Arkansas - DEQ | http://www.adeq.state.ar.us/techsvs/labcert.htm | 88-0637 |
| California DHS (ELAP) | http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx | 2795 |
| DOD ELAP | http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm | L14-51 |
| Florida DOH | http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm | E87412 |
| Hawaii DOH | Not available | - |
| Idaho DHW | http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx | - |
| ISO 17025 | http://www.pjllabs.com/ | L14-50 |
| Louisiana DEQ | http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx | 03016 |
| Maine DHS | Not available | WA01276 |
| Michigan DEQ | http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html | 9949 |
| Minnesota DOH | http://www.health.state.mn.us/accreditation | 053-999-457 |
| Montana DPHHS | http://www.dphhs.mt.gov/publichealth/ | CERT0047 |
| Nevada DEP | http://ndep.nv.gov/bsdwlabservice.htm | WA01276 |
| New Jersey DEP | http://www.nj.gov/dep/oqa/ | WA005 |
| North Carolina DWQ | http://www.dwqlab.org/ | 605 |
| Oklahoma DEQ | http://www.deq.state.ok.us/CSDnew/labcert.htm | 9801 |
| Oregon – DEQ (NELAP) | http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx | WA100010 |
| South Carolina DHEC | http://www.scdhec.gov/environment/envserv/ | 61002 |
| Texas CEQ | http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html | T104704427 |
| Washington DOE | http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html | C544 |
| Wisconsin DNR | http://dnr.wi.gov/ | 998386840 |
| Wyoming (EPA Region 8) | http://www.epa.gov/region8/water/dwhome/wyomingdi.html | - |
| Kelso Laboratory Website | www.alsglobal.com | NA |

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.



Case Narrative

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

ALS ENVIRONMENTAL

Client: ARCADIS U.S., Inc.
Project: Armor Rd. KCMO/ KC001649.0001
Sample Matrix: Water

Service Request No.: K1412993
Date Received: 11/18/14

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two water samples were received for analysis at ALS Environmental on 11/18/14. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

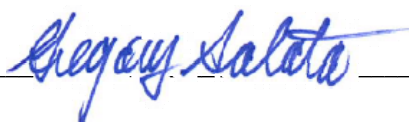
Total and Dissolved Metals

Matrix Spike Recovery Exceptions:

The control criteria for matrix spike recovery of Arsenic for the Total and Dissolved samples GWM-8B (20141117) were not applicable. The analyzed concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____





Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

PC Greg

Cooler Receipt and Preservation Form

Client / Project: Alcomis Service Request K14 12993Received: 11/18/14 Opened: 11/18/14 By: [Signature] Unloaded: 11/18/14 By: [Signature]

1. Samples were received via? Mail Fed Ex UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 FRONT
- If present, were custody seals intact? Y N If present, were they signed and dated? Y N

| Raw Cooler Temp | Corrected Cooler Temp | Raw Temp Blank | Corrected Temp Blank | Corr. Factor | Thermometer ID | Cooler/COC ID | Tracking Number | NA | Filed |
|-----------------|-----------------------|----------------|----------------------|--------------|----------------|---------------|-----------------|----|-------|
| 0.4 | 0.6 | N/P | - | 0.2 | 348 | | 805941329705 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

4. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

| Sample ID on Bottle | Sample ID on COC | Identified by: |
|---------------------|------------------|----------------|
| | | |
| | | |
| | | |

| Sample ID | Bottle Count Bottle Type | Out of Temp | Head- space | Broke | pH | Reagent | Volume added | Reagent Lot Number | Initials | Time |
|-----------|-----------------------------|----------------|----------------|-------|----|---------|-----------------|-----------------------|----------|------|
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Notes, Discrepancies, & Resolutions: _____



Metals

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www.alsglobal.com

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Date Collected: 11/17/14

Project Name: Armor Rd. KCMO

Date Received: 11/18/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-8B (20141117)

Lab Code: K1412993-001

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|------|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 5000 | 1000 | 10000.0 | 11/21/14 | 12/04/14 | 24000 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Date Collected: 11/17/14

Project Name: Armor Rd. KCMO

Date Received: 11/18/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: GWM-8B (20141117)

Lab Code: K1412993-001DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|------|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 5000 | 1000 | 10000.0 | 11/21/14 | 12/04/14 | 23300 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Date Collected: 11/17/14

Project Name: Armor Rd. KCMO

Date Received: 11/18/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: Dup-03 (20141117)

Lab Code: K1412993-002

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|------|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 5000 | 1000 | 10000.0 | 11/21/14 | 12/04/14 | 23900 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Date Collected: 11/17/14

Project Name: Armor Rd. KCMO

Date Received: 11/18/14

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: Dup-03 (20141117)

Lab Code: K1412993-002DISS

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|------|------|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 5000 | 1000 | 10000.0 | 11/21/14 | 12/04/14 | 28200 | | |

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Date Collected:

Project Name: Armor Rd. KCMO

Date Received:

Matrix: WATER

Units: ug/L

Basis: NA

Sample Name: K1412945-MB

Lab Code: K1412993-MB

| Analyte | Analysis Method | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Result | C | Q |
|---------|-----------------|-----|-----|-----------------|----------------|---------------|--------|---|---|
| Arsenic | 7062 | 1.0 | 0.2 | 2.0 | 11/21/14 | 12/04/14 | 0.2 | U | |

Comments:

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Project Name: Armor Rd. KCMO

ICV Source: Inorganic Ventures

CCV Source: ALS MIXED

Concentration Units: ug/L

| | Initial Calibration | | | Continuing Calibration | | | | | |
|---------|---------------------|-------|-------|------------------------|-------|-------|-------|-------|--------|
| Analyte | True | Found | %R(1) | True | Found | %R(1) | Found | %R(1) | Method |
| Arsenic | 7.50 | 7.49 | 100 | 7.50 | 7.19 | 96 | 7.13 | 95 | 7062 |

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Service Request: K1412993

Project No.: KC001649.0001

Project Name: Armor Rd. KCMO

CCV Source: ALS MIXED

Concentration Units: ug/L

| | Initial Calibration | | | Continuing Calibration | | | | | |
|---------|---------------------|-------|-------|------------------------|-------|-------|-------|-------|--------|
| Analyte | True | Found | %R(1) | True | Found | %R(1) | Found | %R(1) | Method |
| Arsenic | | | | 7.50 | 7.02 | 94 | 7.67 | 102 | 7062 |

Metals

- 2b -

CRDL STANDARD FOR AA AND ICP

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Project Name: Armor Rd. KCMO

Concentration Units: ug/L

| Analyte | CRDL Standard for AA | | | CRDL Standard for ICP | | | | |
|---------|----------------------|-------|----|-----------------------|-------|----|-------|----|
| | True | Found | %R | Initial | Final | | | |
| | True | Found | %R | True | Found | %R | Found | %R |
| Arsenic | 0.50 | 0.48 | 96 | | | | | |

- 3 -

BLANKS

Service Request: K1412993

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

| Analyte | Initial Calib. Blank (ug/L) | | Continuing Calibration Blank (ug/L) | | | | | | Method |
|---------|-----------------------------|---|-------------------------------------|---|-----|---|-----|---|--------|
| | C | | 1 | C | 2 | C | 3 | C | |
| Arsenic | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 7062 |

- 3 -

BLANKS

Service Request: K1412993

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

| Analyte | Initial Calib. Blank (ug/L) | C | Continuing Calibration Blank (ug/L) | | | | | | Method |
|---------|-----------------------------|---|-------------------------------------|---|---|---|---|---|--------|
| | | | 1 | C | 2 | C | 3 | C | |
| Arsenic | | | 0.1 | U | | | | | 7062 |

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Units: UG/L

Project Name: Armor Rd. KCMO

Basis: NA

Matrix: WATER

Sample Name: GWM-8B (20141117)S

Lab Code: K1412993-001S

| Analyte | Control Limit %R | Spike Result | C | Sample Result | C | Spike Added | %R | Q | Method |
|---------|---------------------|-----------------|---|------------------|---|----------------|---------|---|--------|
| Arsenic | | 23300 | | 24000 | | 16.00 | -4375.0 | | 7062 |

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

Service Request: K1412993

Units: UG/L

Basis: NA

Matrix: WATER

Lab Code: K1412993-001DISSS

| Analyte | Control Limit %R | Spike Result | C | Sample Result | C | Spike Added | %R | Q | Method |
|---------|------------------|--------------|---|---------------|---|-------------|---------|---|--------|
| Arsenic | | 22300 | | 23300 | | 16.00 | -6250.0 | | 7062 |

An empty field in the Control Limit column indicates the control limit is not applicable

Metals
 - 5B -
 POST SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc Service Request: K1412993
 Project No.: KC001649.0001 Units: UG/L
 Project Name: Armor Rd. KCMO Basis: NA
 Matrix: WATER

Sample Name: Batch QCA Lab Code: K1412945-001A

| Analyte | Control Limit %R | Spike Result | C | Sample Result | C | Spike Added | %R | Q | Method |
|---------|---------------------|-----------------|---|------------------|---|----------------|------|---|--------|
| Arsenic | 80 - 120 | 6.3 | | 1.6 | | 5.0 | 94.0 | | 7062 |

- 6 -

DUPLICATES

Service Request: K1412993

Units: UG/L

Basis: NA

Matrix: WATER

Lab Code: K1412993-001D

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | Method |
|---------|---------------|------------|---|---------------|---|-----|---|--------|
| Arsenic | | 24000 | | 23300 | | 3.0 | | 7062 |

Form VI - IN

- 6 -

DUPLICATES

Service Request: K1412993

Units: UG/L

Basis: NA

Matrix: WATER

Lab Code: K1412993-001DISSD

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | Method |
|---------|---------------|------------|---|---------------|---|-----|---|--------|
| Arsenic | | 23300 | | 21300 | | 9.0 | | 7062 |

An empty field in the Control Limit column indicates the control limit is not applicable.

- 7 -

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Project Name: Armor Rd. KCMO

Aqueous LCS Source: ALS MIXED

Solid LCS Source:

Form VII - IN

Metals

- 10 -

DETECTION LIMITS

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Project Name: Armor Rd. KCMO

ICP/ICP-MS ID #:

GFAA ID #: K-FLAA-02

AA ID #:

| Analyte | Wave-length (nm) | Back-ground | MRL ug/L | MDL ug/L | M |
|---------|---------------------|-------------|-------------|-------------|---|
| Arsenic | 193.6 | | 0.5 | 0.1 | H |

Comments:

Metals
-13-
PREPARATION LOG

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Project Name: Armor Rd. KCMO

Method: F

| Sample ID | Preparation Date | Initial Volume | Final Volume(mL) |
|-------------------|------------------|----------------|------------------|
| K1412993-001 | 11/21/14 | 50.0 | 50.0 |
| K1412993-001D | 11/21/14 | 50.0 | 50.0 |
| K1412993-001DISS | 11/21/14 | 50.0 | 50.0 |
| K1412993-001DISSD | 11/21/14 | 50.0 | 50.0 |
| K1412993-001DISSS | 11/21/14 | 50.0 | 50.0 |
| K1412993-001S | 11/21/14 | 50.0 | 50.0 |
| K1412993-002 | 11/21/14 | 50.0 | 50.0 |
| K1412993-002DISS | 11/21/14 | 50.0 | 50.0 |
| K1412993-MB | 11/21/14 | 50.0 | 50.0 |
| LCSW | 11/21/14 | 50.0 | 50.0 |

Metals
- 14 -
ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Run Number: 120414-As1

Project Name: Armor Rd. KCMO

Instrument ID Number: K-FLAA-02

Method: H

Start Date: 12/04/14

End Date: 12/04/14

| Sample No. | D/F | Time | % R | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|------|-------|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|--|--|--|--|
| | | | | A L | S B | A S | B A | B E | C D | C A | C R | C O | C U | F E | P B | M G | M N | H G | N I | K S | S E | A G | N A | T L | V | Z N | C N | | | | |
| CAL BLK | 1.0 | 09:09 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 0.5 | 1.0 | 09:11 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 1.0 | 1.0 | 09:13 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 5.0 | 1.0 | 09:15 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 7.5 | 1.0 | 09:17 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| STD 10.0 | 1.0 | 09:20 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICV | 1.0 | 09:22 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICB | 1.0 | 09:28 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CRA | 1.0 | 09:30 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.0 | 09:33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV1 | 1.0 | 09:35 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB1 | 1.0 | 09:37 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-MB | 2.0 | 09:40 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| LCSW | 2.0 | 09:42 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 09:44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412945-001A | 1.0 | 09:46 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 09:49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 09:51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 09:53 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 09:56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 09:58 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 10:00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV2 | 1.0 | 10:02 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB2 | 1.0 | 10:05 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 40.0 | 10:07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 10:09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 10:11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 10:14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 10:16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 10:18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20.0 | 10:20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 10:23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals

- 14 -

ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc

Service Request: K1412993

Project No.: KC001649.0001

Run Number: 120414-As1

Project Name: Armor Rd. KCMO

Instrument ID Number: K-FLAA-02

Method: H

Start Date: 12/04/14

End Date: 12/04/14

| Sample No. | D/F | Time | % R | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---------|-------|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|--|--|--|--|
| | | | | A L | S B | A S | B A | B E | C D | C A | C R | C O | C U | F E | P B | M G | M N | H G | N I | K E | S G | A A | N L | T L | V | Z N | C N | | | | |
| ZZZZZZ | 20.0 | 10:25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001 | 10,000. | 10:27 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV3 | 1.0 | 10:29 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB3 | 1.0 | 10:32 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001D | 10,000. | 10:34 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001S | 10,000. | 10:36 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-002 | 10,000. | 10:38 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001DISS | 10,000. | 10:41 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001DISSD | 10,000. | 10:43 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-001DISSS | 10,000. | 10:45 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| K1412993-002DISS | 10,000. | 10:47 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 10:49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2.0 | 10:52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100.0 | 10:54 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV4 | 1.0 | 10:56 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB4 | 1.0 | 10:58 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14



Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

Preparation Information Benchsheet

Prep Run: 224036

Team: Metals

Analyst: Anna
Cheatley

Prep Workflow: MetDig3010A

Prep Method: EPA 3010A

Rush/NPDES: N/A

Status: Prepped

Current Step: Digestion

Prep Date: 11/21/2014
11:25

Due Date: 11/26/2014

Hold Date: 05/11/2015

| Lab Code | Client ID | Bottle # | Initial Amt | Final volume | Spike Amt | Spike ID | Test No List | Comments |
|-------------------------------|--------------------|----------|-------------|--------------|-----------|----------|--------------|--------------|
| KQ1415305-01 | Method Blank | | 50 mL | 50 mL | | | As D, AS_T | 6%HNO3,5%HCl |
| KQ1415305-02 | Lab Control Sample | | 50 mL | 50 mL | 0.2 mL | 74484 | As D, AS_T | 6%HNO3,5%HCl |
| K1412945-001 | GWM-6S (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-001 | GWM-6S (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-002 | GWM-13D (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-002 | GWM-13D (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-003 | GWM-5S (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-003 | GWM-5S (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-004 | GWM-5D (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-004 | GWM-5D (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-005 | GWM-4S (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-005 | GWM-4S (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-006 | GWM-4D (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-006 | GWM-4D (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-007 | FB-02 (20141112) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-007 | FB-02 (20141112) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412945-008 | GWM-2B (20141114) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412945-008 | GWM-2B (20141114) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412993-001 | GWM-8B (20141117) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412993-001 | GWM-8B (20141117) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-03 | Duplicate | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-05 | Duplicate | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-04 | Matrix Spike | .02 | 50 mL | 50 mL | 0.2 mL | 73067 | AS_T | 6%HNO3,5%HCl |
| K1412993-001: KQ1415305-06 | Matrix Spike | .01 | 50 mL | 50 mL | 0.2 mL | 73067 | As D | 6%HNO3,5%HCl |
| K1412993-002 | Dup-03 (20141117) | .02 | 50 mL | 50 mL | | | AS_T | 6%HNO3,5%HCl |

| | | | | | | | | |
|--------------|-------------------|-----|-------|-------|--|--|------|--------------|
| K1412993-002 | Dup-03 (20141117) | .01 | 50 mL | 50 mL | | | As D | 6%HNO3,5%HCl |
|--------------|-------------------|-----|-------|-------|--|--|------|--------------|

16 Total Samples consisting of 10 Client Samples, 4 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

| Name | Type | ID | Expires | Name | Type | ID | Expires |
|--------------|-------|-------|----------|-----------|-------|-------|------------|
| K-MET GFLCSW | Spike | 74484 | 2/1/2015 | K-MET SS2 | Spike | 73067 | 12/20/2014 |

Preparation Materials

| Step | Name | ID | Step | Name | ID |
|-----------|------------|-------|-----------|----------------------------|-------|
| Digestion | K-MET HNO3 | 75020 | Digestion | K-MET 50ml Centrifuge Tube | 76731 |
| Digestion | K-MET HCL | 76516 | | | |

Preparation Hardware / Equipment

| Step | Name | Property | Value | Step | Name | Property | Value |
|-----------|---------------|------------------------|-------|-----------|---------------|------------------------|-------|
| Digestion | K-HotPlate-02 | Thermometer ID 1134195 | 97 | Digestion | K-HotPlate-06 | Thermometer ID 1134275 | 96 |
| Digestion | K-HotPlate-03 | Thermometer ID 1134442 | 96 | | | | |

Preparation Steps

| Step | Started | Finished | By | Assisted By | Training? | Comments |
|-----------|-----------------|-----------------|---------------|-------------|-----------|----------|
| Digestion | 21-NOV-14 11:25 | 21-NOV-14 14:53 | Anna Cheatley | | N | |

Comments

Thermometer ID 1134195 Observed temperature=97C. Correction factor=0. Corrected temperature=97C. Thermometer ID 1134442 Observed temperature=96C. Correction factor=0. Corrected temperature=96C. Thermometer ID 1134275 Observed temperature=96C. Correction factor=0. Corrected temperature=96C.

Review

Reviewed by: BSJ Date: 11/25/14

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

| Solution Name | Element | mLs of 1000ppm Solution | Final Volume | Solution Conc. mg/L | Enter mls Added |
|---|---------|-------------------------|--------------|---------------------|-----------------|
| K-MET SS1 *** Add after HNO3 and before cas cal -14 when making the solution | HNO3 | 50.0 | 1000ml | - | |
| | Al | 100* | 1000ml | 200 | |
| | Ag | 100* | 1000ml | 5 | |
| | Ba | 100* | 1000ml | 200 | |
| | Be | 100* | 1000ml | 5 | |
| | Cd | 100* | 1000ml | 5 | |
| | Co | 100* | 1000ml | 50 | |
| | Cr | 100* | 1000ml | 20 | |
| | Cu | 100* | 1000ml | 25 | |
| | Fe | 100* | 1000ml | 100 | |
| | Pb | 100* | 1000ml | 50 | |
| | Mn | 100* | 1000ml | 50 | |
| | Ni | 100* | 1000ml | 50 | |
| | Sb*** | 50 | 1000ml | 50 | |
| | V | 100* | 1000ml | 50 | |
| | Zn | 100* | 1000ml | 50 | |
| K-MET SS2 | HNO3 | 25.0 | 500ml | - | |
| | As | 2.0 | 500ml | 4 | |
| | Cd | 2.0 | 500ml | 4 | |
| | Pb | 2.0 | 500ml | 4 | |
| | Se | 2.0 | 500ml | 4 | |
| | Tl | 2.0 | 500ml | 4 | |
| | Cu | 2.0 | 500ml | 4 | |
| K-MET SS3 | HNO3 | 25.0 | 500ml | - | |
| | As | 50.0 | 500ml | 100 | |
| | Se | 50.0 | 500ml | 100 | |
| | Tl | 50.0 | 500ml | 100 | |
| | Hg | 6 | 500 | 12 | |
| K-MET SS4 | HNO3 | 25 | 500ml | - | |
| | B | 50 | 500ml | 100 | |
| | Mo | 50 | 500ml | 100 | |
| K-MET SS5 | HNO3 | 10.0 | 200ml | - | |
| | K** | 20 | 200ml | 1000 | |
| | Na** | 20 | 200ml | 1000 | |
| | Mg** | 20 | 200ml | 1000 | |
| | Ca** | 20 | 200ml | 1000 | |

| | | | | | |
|------------------|-------------------|-------------|--------|------|--|
| K-MET GFLCSW | HNO3 | 10.0 | 1000ml | - | |
| | As, Pb, Se, Tl | 5.0 | 1000ml | 2.5 | |
| | Cd | - | - | 1.25 | |
| | Cu | 2.5 | 1000ml | 2.5 | |
| K-MET QCP-CICV-1 | Ca, Mg, Na, K | no dilution | - | 2500 | |
| | Al, Ba | no dilution | - | 1000 | |
| | Fe | no dilution | - | 500 | |
| | Co, Mn, Ni, V, Zn | no dilution | - | 250 | |
| | Cu, Ag | no dilution | - | 125 | |
| | Cr | no dilution | - | 100 | |
| | Be | no dilution | - | 25 | |
| K-MET QCP-CICV-2 | Sb | no dilution | - | 500 | |
| K-MET QCP-CICV-3 | As, Pb, Se, Tl | no dilution | - | 500 | |
| | Cd | no dilution | - | 250 | |

* Denotes volume of mixed stock standard.

** Denotes 10,000 ppm individual stock standards.

| Standard | mls of standard | ppm | Logbook # | Exp. Date |
|----------|-----------------|-----|-----------|-----------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Element Analyzed: As ^{BJS} Hydride Instrument: K-FLAA-02
 Service Request #: K1412945, K1412993, K1413402, K1413380
 Batch QC SR's #: K1412993, K1413402, K1413380
 Calibration Std.: AA1-16-D Expiration Date: 4/2/2015
 2nd Source Std.: AA1-16-C Expiration Date: 1/18/2015
 Starlims #: 424209
 Run #: 120414-As1

Hydride Data Review Form

| | Yes | No | NA |
|---|----------|---------------|---------------|
| 1. ICV within 10% of true Value | <u>X</u> | <u> </u> | <u> </u> |
| 2. Calibration data included | <u>X</u> | <u> </u> | <u> </u> |
| 3. CCV's in control | <u>X</u> | <u> </u> | <u> </u> |
| 4. CCB's and/or ICB's below MRL | <u>X</u> | <u> </u> | <u> </u> |
| 5. All reported Results within Cal. Range | <u>X</u> | <u> </u> | <u> </u> |
| 6. All Calculations are Correct | <u>X</u> | <u> </u> | <u> </u> |

Comments

Primary Reviewed by: BJS Date: 12/4/14
 Secondary Reviewed by: JDB Date: 12/4/14


COLUMBIA ANALYTICAL SERVICES, INC.

FAA Run Log

| | |
|---|---------------------------|
| Method: (Circle Method Used) 7742 <u>7062</u> Other: _____ Element: <u>As Se</u> | Service Request # : _____ |
|---|---------------------------|

| SAMPLE NUMBER | Dilution Factor | Measured (µg/L) | Recoveries (ICV, CCV, CRA, LCS, Matrix Spk.) | Comments Post Spike = 5 ppb |
|-----------------------------|---------------------|-------------------|--|--------------------------------|
| Cal. Blk | - | 0.000 | | |
| Cal. Std 0.5 | - | 0.500 | *(0.025-50ml) | *Cal. Std = AA1-16-D |
| Cal. Std 1.0 | - | 1.000 | *(0.05-50ml) | |
| Cal. Std 5.0 | - | 5.000 | *(0.25-50ml) | |
| Cal. Std 7.5 | - | 7.500 | *(0.375-50ml) | |
| Cal. Std 10.0 | - | 10.000 | *(0.5-50ml) | |
| ICV | - | 7.485 | 100% | ICV Std = AA1-16-C |
| ICB | - | 0.047 | | |
| CRA | - | 0.483 | 97% | |
| CCV | - | 6.692 | 89% | |
| CCV | - | 7.191 | 96% | |
| CCB | - | 0.050 | | |
| K1412945-MB | 1/2 | 0.006 | | |
| LCSWK1412945 | 1/2 | 4.808 | 96% | |
| K1412945-001 | 1/2*1/10 | 1.594 | | |
| K1412945-001A | 1/2*1/10 | 6.301 | 94% | |
| K1412945-002 | 1/2*1/20 | 1.962 | | |
| K1412945-003 | 1/2*1/20 | 2.311 | | |
| K1412945-004 | 1/2*1/10 | 2.923 | | |
| K1412945-005 | 1/2*1/10 | 1.582 | | |
| K1412945-006 | 1/2*1/10 | 3.229 | | |
| K1412945-007 | 1/2 | 0.021 | | |
| CCV | - | 7.128 | 95% | |
| CCB | - | 0.058 | | |
| K1412945-008 | 1/2*1/20 | 3.087 | | |
| K1412945-001DISS | 1/2*1/10 | -0.164 | <i>KIS 12/4/11</i> | |
| K1412945-002DISS | 1/2*1/20 | 1.548 | | |
| K1412945-003DISS | 1/2*1/20 | 2.146 | | |
| K1412945-004DISS | 1/2*1/10 | 2.594 | | |
| K1412945-005DISS | 1/2*1/10 | 1.162 | | |

| | | | | |
|--|-----------------|-----------------|---------------------|-----------------|
| True Values/QC Limits: | LCSW | Water Spike | LCSS (ERA D045540) | Soil Spike |
| Arsenic: | 10ppb (80-120%) | 16ppb (75-125%) | 99.6mg/kg (70-130%) | 40ppb (75-125%) |
| Selenium | 10ppb (80-120%) | 16ppb (75-125%) | 150mg/kg (68-132%) | 40ppb (75-125%) |
| Cx = MSA Corrected Concentration (as per method) | | | | |

| | | |
|--|------------------|-------------------|
| Analyst  | Date: 12/4/11 | Page Number: 1 |
|--|------------------|-------------------|

COLUMBIA ANALYTICAL SERVICES, INC.


FAA Run Log

| | |
|---|---------------------------|
| Method: (Circle Method Used) 7742 <u>7062</u> Other: _____ Element: <u>As Se</u> | Service Request # : _____ |
|---|---------------------------|

| SAMPLE NUMBER | Dilution Factor | Measured (µg/L) | Recoveries (ICV, CCV, CRA, LCS, Matrix Spk.) | Comments Post Spike = 5 ppb |
|-------------------|--------------------|--------------------|--|------------------------------------|
| K1412945-006DISS | 1/2*1/10 | 2.857 | | |
| K1412945-007DISS | 1/2 | 0.086 | | |
| K1412945-008DISS | 1/2*1/20 | 3.398 | | |
| K1412993-001 | 1/2*1/5000 | 2.403 | | |
| CCV | - | 7.019 | 94% | |
| CCB | - | 0.058 | | |
| K1412993-001D | 1/2*1/5000 | 2.328 | | |
| K1412993-001S | 1/2*1/5000 | 2.333 | Sample is 4X | |
| K1412993-002 | 1/2*1/5000 | 2.393 | | |
| K1412993-001DISS | 1/2*1/5000 | 2.329 | | |
| K1412993-001DDISS | 1/2*1/5000 | 2.129 | | |
| K1412993-001SDISS | 1/2*1/5000 | 2.226 | Sample is 4X | |
| K1412993-002DISS | 1/2*1/5000 | 2.815 | | |
| K1413402-MB | 1/2 | 0.017 | | |
| LCSWK1413402 | 1/2 | 4.886 | 98% | |
| K1413402-001 | 1/2*1/50 | 2.121 | | |
| CCV | - | 7.665 | 102% | |
| CCB | - | 0.075 | | |
| K1413402-002 | 1/2*1/10 | 2.872 | | |
| K1413402-002D | 1/2*1/10 | 2.811 | | |
| K1413402-002S | 1/2*1/10 | 3.483 | 76% | |
| K1413402-003 | 1/2*1/50 | 2.119 | | |
| K1413402-004 | 1/2 | 0.115 | | |
| K1413402-004A | 1/2 | 4.835 | 97% | |
| K1413402-005 | 1/2*1/5 | 1.668 | | |
| K1413402-006 | 1/2*1/1000 | 1.889 | | |
| K1413402-007 | 1/2*1/2 | 1.962 | | |
| K1413402-008 | 1/2*1/1000 | 2.711 | | |
| CCV | - | 7.727 | 103% | |
| CCB | - | 0.081 | | |

| | | | | |
|-------------------------------|-----------------|-----------------|----------------------|-----------------|
| True Values/QC Limits: | LCSW | Water Spike | LCSS (ERA D045540) | Soil Spike |
| Arsenic: | 10ppb (80-120%) | 16ppb (75-125%) | 146.0mg/kg (80-120%) | 20ppb (75-125%) |
| Selenium | 10ppb (80-120%) | 16ppb (75-125%) | 192.0mg/kg (62-147%) | 20ppb (75-125%) |

Cx = MSA Corrected Concentration (as per method)

| | | |
|---|------------------|-------------------|
| Analyst  | Date: 12/4/17 | Page Number: 2 |
|---|------------------|-------------------|

COLUMBIA ANALYTICAL SERVICES, INC.

FAA Run Log

| | |
|---|---------------------------|
| Method: (Circle Method Used) 7742 <u>7062</u> Other: _____ Element: <u>As Se</u> | Service Request # : _____ |
|---|---------------------------|


| SAMPLE NUMBER | Dilution Factor | Measured (µg/L) | Recoveries (ICV, CCV, CRA, LCS, Matrix Spk.) | | Comments Post Spike = 5 ppb |
|-------------------|--------------------|--------------------|--|--|------------------------------------|
| K1413402-009 | 1/2 | 0.130 | | | |
| K1413402-010 | 1/2*1/50 | 2.013 | | | |
| K1413402-001DISS | 1/2*1/50 | 2.431 | | | |
| K1413402-002DISS | 1/2*1/10 | 2.617 | | | |
| K1413402-002DDISS | 1/2*1/10 | 2.752 | | | |
| K1413402-002SDISS | 1/2*1/10 | 3.440 | 103% | | |
| K1413402-003DISS | 1/2*1/50 | 2.517 | | | |
| K1413402-004DISS | 1/2 | 0.094 | | | |
| K1413402-005DISS | 1/2*1/5 | 1.361 | | | |
| K1413402-006DISS | 1/2*1/1000 | 2.020 | | | |
| CCV | - | 7.677 | 102% | | |
| CCB | - | 0.079 | | | |
| K1413402-007DISS | 1/2*1/2 | 1.552 | | | |
| K1413402-008DISS | 1/2*1/1000 | 2.338 | | | |
| K1413402-009DISS | 1/2 | 0.084 | | | |
| K1413402-010DISS | 1/2*1/50 | 1.547 | | | |
| K1413380-MB | 1/2 | 0.011 | | | |
| LCSSWK1413380 | 1/2 | 4.922 | 98% | | |
| K1413380-001 | 1/2 | 0.193 | | | |
| K1413380-002 | 1/2*1/5 | 1.764 | | | |
| K1413380-003 | 1/2 | 0.541 | | | |
| K1413380-003A | 1/2 | 5.193 | 95% | | |
| CCV | - | 7.650 | 102% | | |
| CCB | - | 0.095 | | | |
| K1413380-003D | 1/2 | 0.473 | | | |
| K1413380-003S | 1/2 | 8.533 | 101% | | |
| K1413380-004 | 1/2*1/20 | 2.182 | | | |
| K1413380-005 | 1/2*1/5 | 2.154 | | | |
| K1413380-006 | 1/2 | 0.047 | | | |
| K1413380-007 | 1/2*1/5 | 1.977 | | | |

True Values/QC Limits: LCSW Water Spike LCSS (ERA D045540) Soil Spike

Arsenic: 10ppb (80-120%) 16ppb (75-125%) 146.0mg/kg (80-120%) 20ppb (75-125%)


Selenium 10ppb (80-120%) 16ppb (75-125%) 192.0mg/kg (62-147%) 20ppb (75-125%)

Cx = MSA Corrected Concentration (as per method)

| | | |
|---|-------------------|-------------------|
| Analyst  | Date: 12/14/14 | Page Number: 3 |
|---|-------------------|-------------------|

FAA Run Log

[illegible]

| | | |
|--|---------|--------------|
| Analyst | Date: | Page Number: |
|  | 12/4/14 | 4 |

=====
Analysis Begun

Logged In Analyst: ALKLS.ALKLSXP315 Technique: AA FIAS-Flame
Spectrometer Model: AAnalyst 200, S/N 200S5061701 Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif
Batch ID: 120414-As1
Results Data Set: 120414-As1
Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

=====
Sequence No.: 1 Autosampler Location: 1
Sample ID: Cal Blk Date Collected: 12/4/2014 9:09:02 AM
Analyst: Data Type: Original

Replicate Data: Cal Blk

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [0.00] | 0.003 | -0.007 | 0.003 | | | 09:09:18 | Yes |
| 2 | | [0.00] | 0.001 | -0.012 | 0.001 | | | 09:09:52 | Yes |
| 3 | | [0.00] | 0.002 | 0.005 | 0.002 | | | 09:10:26 | Yes |
| Mean: | | [0.00] | 0.002 | | | | | | |
| SD: | | 0.00 | 0.0008 | | | | | | |
| %RSD: | | 0.00 | 38.71 | | | | | | |

Auto-zero performed.

=====
Sequence No.: 2 Autosampler Location: 2
Sample ID: Std 0.5 Date Collected: 12/4/2014 9:11:14 AM
Analyst: Data Type: Original

Replicate Data: Std 0.5

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [0.5] | 0.027 | 0.098 | 0.029 | | | 09:11:31 | Yes |
| 2 | | [0.5] | 0.028 | 0.093 | 0.030 | | | 09:12:05 | Yes |
| 3 | | [0.5] | 0.027 | 0.096 | 0.029 | | | 09:12:39 | Yes |
| Mean: | | [0.5] | 0.027 | | | | | | |
| SD: | | 0.0 | 0.0006 | | | | | | |
| %RSD: | | 0.0 | 2.30 | | | | | | |

Standard number 1 applied. [0.5]
Correlation Coef.: 1.000000 Slope: 0.05422 Intercept: 0.00000

=====
Sequence No.: 3 Autosampler Location: 3
Sample ID: Std 1.0 Date Collected: 12/4/2014 9:13:28 AM
Analyst: Data Type: Original

Replicate Data: Std 1.0

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [1.0] | 0.053 | 0.176 | 0.055 | | | 09:13:45 | Yes |
| 2 | | [1.0] | 0.053 | 0.176 | 0.055 | | | 09:14:19 | Yes |
| 3 | | [1.0] | 0.052 | 0.182 | 0.055 | | | 09:14:53 | Yes |
| Mean: | | [1.0] | 0.053 | | | | | | |
| SD: | | 0.0 | 0.0004 | | | | | | |
| %RSD: | | 0.0 | 0.76 | | | | | | |

Standard number 2 applied. [1.0]
Correlation Coef.: 0.999361 Slope: 0.05303 Intercept: 0.00000

=====
Sequence No.: 4 Autosampler Location: 4
Sample ID: Std 5.0 Date Collected: 12/4/2014 9:15:42 AM
Analyst: Data Type: Original

Replicate Data: Std 5.0

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [5.0] | 0.249 | 0.853 | 0.252 | | | 09:16:00 | Yes |
| 2 | | [5.0] | 0.250 | 0.849 | 0.252 | | | 09:16:34 | Yes |
| 3 | | [5.0] | 0.250 | 0.855 | 0.252 | | | 09:17:08 | Yes |
| Mean: | | [5.0] | 0.250 | | | | | | |
| SD: | | 0.0 | 0.0004 | | | | | | |
| %RSD: | | 0.0 | 0.16 | | | | | | |

Standard number 3 applied. [5.0]
Correlation Coef.: 0.999812 Slope: 0.05014 Intercept: 0.00000

Sequence No.: 5

Autosampler Location: 5

Sample ID: Std 7.5

Date Collected: 12/4/2014 9:17:58 AM

Analyst:

Data Type: Original

Replicate Data: Std 7.5

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [7.5] | 0.367 | 1.260 | 0.369 | | | 09:18:16 | Yes |
| 2 | | [7.5] | 0.368 | 1.261 | 0.370 | | | 09:18:50 | Yes |
| 3 | | [7.5] | 0.373 | 1.277 | 0.375 | | | 09:19:24 | Yes |
| Mean: | | [7.5] | 0.370 | | | | | | |
| SD: | | 0.0 | 0.0033 | | | | | | |
| %RSD: | | 0.0 | 0.88 | | | | | | |

Standard number 4 applied. [7.5]
Correlation Coef.: 0.999852 Slope: 0.04955 Intercept: 0.00000

Sequence No.: 6

Autosampler Location: 6

Sample ID: Std 10.0

Date Collected: 12/4/2014 9:20:15 AM

Analyst:

Data Type: Original

Replicate Data: Std 10.0

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | | [10.0] | 0.480 | 1.632 | 0.482 | | | 09:20:34 | Yes |
| 2 | | [10.0] | 0.471 | 1.614 | 0.473 | | | 09:21:08 | Yes |
| 3 | | [10.0] | 0.475 | 1.634 | 0.477 | | | 09:21:41 | Yes |
| Mean: | | [10.0] | 0.475 | | | | | | |
| SD: | | 0.0 | 0.0042 | | | | | | |
| %RSD: | | 0.0 | 0.89 | | | | | | |

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999340 Slope: 0.04847 Intercept: 0.00000
The calibration curve may not be linear.

Calibration data for As 193.70

Equation: Linear Through Zero

| ID | Mean Signal | Entered | Calculated | Standard | |
|----------|-------------|---------|------------|-----------|------|
| | (Abs) | Conc. | Conc. | Deviation | %RSD |
| | | ug/L | ug/L | | |
| Cal Blk | 0.0000 | 0 | 0.0000 | 0.00 | 38.7 |
| Std 0.5 | 0.0271 | 0.5 | 0.5594 | 0.00 | 2.3 |
| Std 1.0 | 0.0527 | 1.0 | 1.0879 | 0.00 | 0.8 |
| Std 5.0 | 0.2499 | 5.0 | 5.1565 | 0.00 | 0.2 |
| Std 7.5 | 0.3696 | 7.5 | 7.6257 | 0.00 | 0.9 |
| Std 10.0 | 0.4753 | 10.0 | 9.8068 | 0.00 | 0.9 |

Correlation Coef.: 0.999340 Slope: 0.04847 Intercept: 0.00000

Sequence No.: 7

Autosampler Location: 7

Sample ID: ICV

Date Collected: 12/4/2014 9:22:32 AM

Analyst:

Data Type: Original

Replicate Data: ICV

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.532 | 7.532 | 0.365 | 1.258 | 0.367 | | | 09:22:52 | Yes |
| 2 | 7.398 | 7.398 | 0.359 | 1.240 | 0.361 | | | 09:23:26 | Yes |
| 3 | 7.526 | 7.526 | 0.365 | 1.247 | 0.367 | | | 09:24:01 | Yes |
| Mean: | 7.485 | 7.485 | 0.363 | | | | | | |
| SD: | 0.0756 | 0.0756 | 0.0037 | | | | | | |
| %RSD: | 1.011 | 1.011 | 1.01 | | | | | | |

QC value within limits for As 193.70 Recovery = 99.80%

All analyte(s) passed QC.

User canceled analysis.

=====
Analysis BegunLogged In Analyst: ALKLS.ALKLSXP315 Technique: AA FIAS-Flame
Spectrometer Model: AAnalyst 200, S/N 20085061701 Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif

Batch ID: 120414-As1

Results Data Set: 120414-As1

Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

=====
Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 9:28:39 AM

Data Type: Original

Replicate Data: ICB

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0734 | 0.0734 | 0.004 | 0.028 | 0.006 | | | 09:28:55 | Yes |
| 2 | 0.0516 | 0.0516 | 0.002 | 0.027 | 0.005 | | | 09:29:29 | Yes |
| 3 | 0.0148 | 0.0148 | 0.001 | 0.010 | 0.003 | | | 09:30:03 | Yes |
| Mean: | 0.0466 | 0.0466 | 0.002 | | | | | | |
| SD: | 0.0296 | 0.0296 | 0.0014 | | | | | | |
| %RSD: | 63.54 | 63.54 | 63.54 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

=====
Sequence No.: 9

Sample ID: CRA

Analyst:

Autosampler Location: 2

Date Collected: 12/4/2014 9:30:51 AM

Data Type: Original

Replicate Data: CRA

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.4925 | 0.4925 | 0.024 | 0.089 | 0.026 | | | 09:31:07 | Yes |
| 2 | 0.4785 | 0.4785 | 0.023 | 0.090 | 0.025 | | | 09:31:41 | Yes |
| 3 | 0.4780 | 0.4780 | 0.023 | 0.089 | 0.025 | | | 09:32:15 | Yes |
| Mean: | 0.4830 | 0.4830 | 0.023 | | | | | | |
| SD: | 0.0083 | 0.0083 | 0.0004 | | | | | | |
| %RSD: | 1.708 | 1.708 | 1.71 | | | | | | |

QC value within limits for As 193.70 Recovery = 96.60%

All analyte(s) passed QC.

=====
Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 5

Date Collected: 12/4/2014 9:33:04 AM

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 6.705 | 6.705 | 0.325 | 1.113 | 0.327 | | | 09:33:22 | Yes |
| 2 | 6.705 | 6.705 | 0.325 | 1.116 | 0.327 | | | 09:33:56 | Yes |
| 3 | 6.666 | 6.666 | 0.323 | 1.120 | 0.325 | | | 09:34:29 | Yes |
| Mean: | 6.692 | 6.692 | 0.324 | | | | | | |
| SD: | 0.0229 | 0.0229 | 0.0011 | | | | | | |
| %RSD: | 0.3422 | 0.3422 | 0.34 | | | | | | |

QC value less than the lower limit for As 193.70 Recovery = 89.23%

QC Failed. Stop the analysis.

User canceled analysis.

=====
Analysis BegunLogged In Analyst: ALKLS.ALKLSXP315 Technique: AA FIAS-Flame
Spectrometer Model: AAnalyst 200, S/N 200S5061701 Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif

Batch ID: 120414-As1

Results Data Set: 120414-As1

Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 5

Date Collected: 12/4/2014 9:35:36 AM

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.133 | 7.133 | 0.346 | 1.202 | 0.348 | | | 09:35:53 | Yes |
| 2 | 7.187 | 7.187 | 0.348 | 1.205 | 0.351 | | | 09:36:27 | Yes |
| 3 | 7.252 | 7.252 | 0.351 | 1.216 | 0.354 | | | 09:37:01 | Yes |
| Mean: | 7.191 | 7.191 | 0.349 | | | | | | |
| SD: | 0.0594 | 0.0594 | 0.0029 | | | | | | |
| %RSD: | 0.8256 | 0.8256 | 0.83 | | | | | | |

QC value within limits for As 193.70 Recovery = 95.88%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 9:37:52 AM

Data Type: Original

Replicate Data: CCB

| Repl # | SampleConc ug/L | StdndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0862 | 0.0862 | 0.004 | 0.023 | 0.006 | | | 09:38:08 | Yes |
| 2 | 0.0407 | 0.0407 | 0.002 | 0.007 | 0.004 | | | 09:38:42 | Yes |
| 3 | 0.0218 | 0.0218 | 0.001 | 0.003 | 0.003 | | | 09:39:16 | Yes |
| Mean: | 0.0496 | 0.0496 | 0.002 | | | | | | |
| SD: | 0.0331 | 0.0331 | 0.0016 | | | | | | |
| %RSD: | 66.78 | 66.78 | 66.78 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: K1412945-MB

Analyst:

Autosampler Location: 9

Date Collected: 12/4/2014 9:40:05 AM

Data Type: Original

Replicate Data: K1412945-MB

| Repl # | SampleConc ug/L | StdndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0103 | 0.0103 | 0.000 | 0.006 | 0.003 | | | 09:40:21 | Yes |

| | | | | | | | |
|-------|--------|--------|--------|--------|-------|----------|-----|
| 2 | 0.0005 | 0.0005 | 0.000 | -0.004 | 0.002 | 09:40:55 | Yes |
| 3 | 0.0081 | 0.0081 | 0.000 | 0.007 | 0.003 | 09:41:29 | Yes |
| Mean: | 0.0063 | 0.0063 | 0.000 | | | | |
| SD: | 0.0051 | 0.0051 | 0.0002 | | | | |
| %RSD: | 81.30 | 81.30 | 81.30 | | | | |

Sequence No.: 13

Autosampler Location: 10

Sample ID: LCSWK1412945

Date Collected: 12/4/2014 9:42:18 AM

Analyst:

Data Type: Original

Replicate Data: LCSWK1412945

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 4.793 | 4.793 | 0.232 | 0.805 | 0.234 | | | 09:42:34 | Yes |
| 2 | 4.831 | 4.831 | 0.234 | 0.813 | 0.236 | | | 09:43:08 | Yes |
| 3 | 4.802 | 4.802 | 0.233 | 0.817 | 0.235 | | | 09:43:42 | Yes |
| Mean: | 4.808 | 4.808 | 0.233 | | | | | | |
| SD: | 0.0197 | 0.0197 | 0.0010 | | | | | | |
| %RSD: | 0.4106 | 0.4106 | 0.41 | | | | | | |

Sequence No.: 14

Autosampler Location: 11

Sample ID: K1412945-001

Date Collected: 12/4/2014 9:44:31 AM

Analyst:

Data Type: Original

Replicate Data: K1412945-001

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.617 | 1.617 | 0.078 | 0.278 | 0.081 | | | 09:44:49 | Yes |
| 2 | 1.594 | 1.594 | 0.077 | 0.271 | 0.079 | | | 09:45:23 | Yes |
| 3 | 1.571 | 1.571 | 0.076 | 0.268 | 0.078 | | | 09:46:01 | Yes |
| Mean: | 1.594 | 1.594 | 0.077 | | | | | | |
| SD: | 0.0233 | 0.0233 | 0.0011 | | | | | | |
| %RSD: | 1.464 | 1.464 | 1.46 | | | | | | |

Sequence No.: 15

Autosampler Location: 12

Sample ID: K1412945-001A

Date Collected: 12/4/2014 9:46:55 AM

Analyst:

Data Type: Original

Replicate Data: K1412945-001A

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 6.289 | 6.289 | 0.305 | 1.067 | 0.307 | | | 09:47:14 | Yes |
| 2 | 6.303 | 6.303 | 0.305 | 1.065 | 0.308 | | | 09:47:49 | Yes |
| 3 | 6.312 | 6.312 | 0.306 | 1.084 | 0.308 | | | 09:48:23 | Yes |
| Mean: | 6.301 | 6.301 | 0.305 | | | | | | |
| SD: | 0.0114 | 0.0114 | 0.0006 | | | | | | |
| %RSD: | 0.1809 | 0.1809 | 0.18 | | | | | | |

Sequence No.: 16

Autosampler Location: 13

Sample ID: K1412945-002

Date Collected: 12/4/2014 9:49:23 AM

Analyst:

Data Type: Original

Replicate Data: K1412945-002

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.987 | 1.987 | 0.096 | 0.342 | 0.099 | | | 09:49:41 | Yes |
| 2 | 1.958 | 1.958 | 0.095 | 0.327 | 0.097 | | | 09:50:15 | Yes |
| 3 | 1.940 | 1.940 | 0.094 | 0.327 | 0.096 | | | 09:50:49 | Yes |
| Mean: | 1.962 | 1.962 | 0.095 | | | | | | |
| SD: | 0.0240 | 0.0240 | 0.0012 | | | | | | |
| %RSD: | 1.222 | 1.222 | 1.22 | | | | | | |

Sequence No.: 17
Sample ID: K1412945-003
Analyst:

Autosampler Location: 14
Date Collected: 12/4/2014 9:51:40 AM
Data Type: Original

Replicate Data: K1412945-003

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.280 | 2.280 | 0.110 | 0.392 | 0.113 | | | 09:51:58 | Yes |
| 2 | 2.330 | 2.330 | 0.113 | 0.391 | 0.115 | | | 09:52:32 | Yes |
| 3 | 2.322 | 2.322 | 0.113 | 0.382 | 0.115 | | | 09:53:06 | Yes |
| Mean: | 2.311 | 2.311 | 0.112 | | | | | | |
| SD: | 0.0272 | 0.0272 | 0.0013 | | | | | | |
| %RSD: | 1.178 | 1.178 | 1.18 | | | | | | |

Sequence No.: 18
Sample ID: K1412945-004
Analyst:

Autosampler Location: 15
Date Collected: 12/4/2014 9:53:57 AM
Data Type: Original

Replicate Data: K1412945-004

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.892 | 2.892 | 0.140 | 0.490 | 0.142 | | | 09:54:16 | Yes |
| 2 | 2.906 | 2.906 | 0.141 | 0.492 | 0.143 | | | 09:54:50 | Yes |
| 3 | 2.970 | 2.970 | 0.144 | 0.504 | 0.146 | | | 09:55:24 | Yes |
| Mean: | 2.923 | 2.923 | 0.142 | | | | | | |
| SD: | 0.0414 | 0.0414 | 0.0020 | | | | | | |
| %RSD: | 1.417 | 1.417 | 1.42 | | | | | | |

Sequence No.: 19
Sample ID: K1412945-005
Analyst:

Autosampler Location: 16
Date Collected: 12/4/2014 9:56:15 AM
Data Type: Original

Replicate Data: K1412945-005

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.628 | 1.628 | 0.079 | 0.281 | 0.081 | | | 09:56:35 | Yes |
| 2 | 1.583 | 1.583 | 0.077 | 0.268 | 0.079 | | | 09:57:08 | Yes |
| 3 | 1.536 | 1.536 | 0.074 | 0.265 | 0.077 | | | 09:57:42 | Yes |
| Mean: | 1.582 | 1.582 | 0.077 | | | | | | |
| SD: | 0.0456 | 0.0456 | 0.0022 | | | | | | |
| %RSD: | 2.884 | 2.884 | 2.88 | | | | | | |

Sequence No.: 20
Sample ID: K1412945-006
Analyst:

Autosampler Location: 17
Date Collected: 12/4/2014 9:58:34 AM
Data Type: Original

Replicate Data: K1412945-006

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 3.225 | 3.225 | 0.156 | 0.548 | 0.158 | | | 09:58:50 | Yes |
| 2 | 3.247 | 3.247 | 0.157 | 0.551 | 0.160 | | | 09:59:24 | Yes |
| 3 | 3.216 | 3.216 | 0.156 | 0.552 | 0.158 | | | 09:59:57 | Yes |
| Mean: | 3.229 | 3.229 | 0.157 | | | | | | |
| SD: | 0.0160 | 0.0160 | 0.0008 | | | | | | |
| %RSD: | 0.4968 | 0.4968 | 0.50 | | | | | | |

Sequence No.: 21
Sample ID: K1412945-007
Analyst:

Autosampler Location: 18
Date Collected: 12/4/2014 10:00:46 AM
Data Type: Original

Replicate Data: K1412945-007

| Repl # | SampleConc ug/L | StndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0357 | 0.0357 | 0.002 | 0.009 | 0.004 | | | 10:01:02 | Yes |
| 2 | 0.0301 | 0.0301 | 0.001 | 0.018 | 0.004 | | | 10:01:36 | Yes |
| 3 | -0.0039 | -0.0039 | -0.000 | -0.003 | 0.002 | | | 10:02:09 | Yes |
| Mean: | 0.0206 | 0.0206 | 0.001 | | | | | | |
| SD: | 0.0214 | 0.0214 | 0.0010 | | | | | | |
| %RSD: | 104.0 | 104.0 | 103.96 | | | | | | |

Sequence No.: 22

Sample ID: CCV

Analyst:

Autosampler Location: 5

Date Collected: 12/4/2014 10:02:58 AM

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.119 | 7.119 | 0.345 | 1.201 | 0.347 | | | 10:03:16 | Yes |
| 2 | 7.114 | 7.114 | 0.345 | 1.210 | 0.347 | | | 10:03:50 | Yes |
| 3 | 7.151 | 7.151 | 0.347 | 1.207 | 0.349 | | | 10:04:23 | Yes |
| Mean: | 7.128 | 7.128 | 0.345 | | | | | | |
| SD: | 0.0200 | 0.0200 | 0.0010 | | | | | | |
| %RSD: | 0.2799 | 0.2799 | 0.28 | | | | | | |

QC value within limits for As 193.70 Recovery = 95.04%

All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 10:05:14 AM

Data Type: Original

Replicate Data: CCB

| Repl # | SampleConc ug/L | StndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.1003 | 0.1003 | 0.005 | 0.029 | 0.007 | | | 10:05:30 | Yes |
| 2 | 0.0467 | 0.0467 | 0.002 | 0.015 | 0.004 | | | 10:06:04 | Yes |
| 3 | 0.0273 | 0.0273 | 0.001 | 0.009 | 0.004 | | | 10:06:37 | Yes |
| Mean: | 0.0581 | 0.0581 | 0.003 | | | | | | |
| SD: | 0.0378 | 0.0378 | 0.0018 | | | | | | |
| %RSD: | 65.13 | 65.13 | 65.13 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 24

Sample ID: K1412945-008

Analyst:

Autosampler Location: 19

Date Collected: 12/4/2014 10:07:26 AM

Data Type: Original

Replicate Data: K1412945-008

| Repl # | SampleConc ug/L | StndConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 3.079 | 3.079 | 0.149 | 0.530 | 0.151 | | | 10:07:42 | Yes |
| 2 | 3.073 | 3.073 | 0.149 | 0.520 | 0.151 | | | 10:08:16 | Yes |
| 3 | 3.109 | 3.109 | 0.151 | 0.533 | 0.153 | | | 10:08:50 | Yes |
| Mean: | 3.087 | 3.087 | 0.150 | | | | | | |
| SD: | 0.0189 | 0.0189 | 0.0009 | | | | | | |
| %RSD: | 0.6137 | 0.6137 | 0.61 | | | | | | |

Sequence No.: 25

Sample ID: K1412945-001DISS

Analyst:

Autosampler Location: 20

Date Collected: 12/4/2014 10:09:38 AM

Data Type: Original

Replicate Data: K1412945-001DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | -0.2665 | -0.2665 | -0.013 | -0.664 | -0.011 | | | 10:09:55 | Yes |
| 2 | -0.0287 | -0.0287 | -0.001 | -0.050 | 0.001 | | | 10:10:29 | Yes |
| 3 | -0.1965 | -0.1965 | -0.010 | -0.191 | -0.007 | | | 10:11:02 | Yes |

Changing BOC

Mean: -0.1639 -0.1639 -0.008
SD: 0.1222 0.1222 0.0059
%RSD: 74.55 74.55 74.55

Changing BOC

=====

Sequence No.: 26
Sample ID: K1412945-002DISS
Analyst:

Autosampler Location: 21

Date Collected: 12/4/2014 10:11:51 AM

Data Type: Original

Replicate Data: K1412945-002DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.578 | 1.578 | 0.076 | 0.241 | 0.079 | | | 10:12:08 | Yes |
| 2 | 1.538 | 1.538 | 0.075 | 0.248 | 0.077 | | | 10:12:42 | Yes |
| 3 | 1.528 | 1.528 | 0.074 | 0.216 | 0.076 | | | 10:13:16 | Yes |

Mean: 1.548 1.548 0.075
SD: 0.0261 0.0261 0.0013
%RSD: 1.688 1.688 1.69

=====

Sequence No.: 27
Sample ID: K1412945-003DISS
Analyst:

Autosampler Location: 22

Date Collected: 12/4/2014 10:14:05 AM

Data Type: Original

Replicate Data: K1412945-003DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.121 | 2.121 | 0.103 | 0.362 | 0.105 | | | 10:14:23 | Yes |
| 2 | 2.112 | 2.112 | 0.102 | 0.358 | 0.105 | | | 10:14:56 | Yes |
| 3 | 2.204 | 2.204 | 0.107 | 0.369 | 0.109 | | | 10:15:30 | Yes |

Mean: 2.146 2.146 0.104
SD: 0.0504 0.0504 0.0024
%RSD: 2.350 2.350 2.35

=====

Sequence No.: 28
Sample ID: K1412945-004DISS
Analyst:

Autosampler Location: 23

Date Collected: 12/4/2014 10:16:18 AM

Data Type: Original

Replicate Data: K1412945-004DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.623 | 2.623 | 0.127 | 0.445 | 0.129 | | | 10:16:36 | Yes |
| 2 | 2.639 | 2.639 | 0.128 | 0.439 | 0.130 | | | 10:17:10 | Yes |
| 3 | 2.519 | 2.519 | 0.122 | 0.411 | 0.124 | | | 10:17:43 | Yes |

Mean: 2.594 2.594 0.126
SD: 0.0652 0.0652 0.0032
%RSD: 2.512 2.512 2.51

=====

Sequence No.: 29
Sample ID: K1412945-005DISS
Analyst:

Autosampler Location: 24

Date Collected: 12/4/2014 10:18:33 AM

Data Type: Original

Replicate Data: K1412945-005DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|----------|---------|------|------|-------|-------|------|------|
|------|------------|----------|---------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|-------|--------|--------|--------|-------|--------|------|----------|--------|
| 1 | 1.241 | 1.241 | 0.060 | 0.206 | 0.062 | | 10:18:51 | Yes |
| 2 | 1.101 | 1.101 | 0.053 | 0.124 | 0.056 | | 10:19:25 | Yes |
| 3 | 1.143 | 1.143 | 0.055 | 0.189 | 0.058 | | 10:19:58 | Yes |
| Mean: | 1.162 | 1.162 | 0.056 | | | | | |
| SD: | 0.0717 | 0.0717 | 0.0035 | | | | | |
| %RSD: | 6.174 | 6.174 | 6.17 | | | | | |

Sequence No.: 30 Autosampler Location: 25
Sample ID: K1412945-006DISS Date Collected: 12/4/2014 10:20:48 AM
Analyst: Data Type: Original

Replicate Data: K1412945-006DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.844 | 2.844 | 0.138 | 0.480 | 0.140 | | | 10:21:06 | Yes |
| 2 | 2.900 | 2.900 | 0.141 | 0.478 | 0.143 | | | 10:21:40 | Yes |
| 3 | 2.826 | 2.826 | 0.137 | 0.432 | 0.139 | | | 10:22:14 | Yes |
| Mean: | 2.857 | 2.857 | 0.138 | | | | | | |
| SD: | 0.0387 | 0.0387 | 0.0019 | | | | | | |
| %RSD: | 1.355 | 1.355 | 1.36 | | | | | | |

Sequence No.: 31 Autosampler Location: 26
Sample ID: K1412945-007DISS Date Collected: 12/4/2014 10:23:04 AM
Analyst: Data Type: Original

Replicate Data: K1412945-007DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1212 | 0.1212 | 0.006 | 0.018 | 0.008 | | | 10:23:22 | Yes |
| 2 | 0.0763 | 0.0763 | 0.004 | 0.003 | 0.006 | | | 10:23:56 | Yes |
| 3 | 0.0611 | 0.0611 | 0.003 | 0.011 | 0.005 | | | 10:24:29 | Yes |
| Mean: | 0.0862 | 0.0862 | 0.004 | | | | | | |
| SD: | 0.0312 | 0.0312 | 0.0015 | | | | | | |
| %RSD: | 36.20 | 36.20 | 36.20 | | | | | | |

Sequence No.: 32 Autosampler Location: 27
Sample ID: K1412945-008DISS Date Collected: 12/4/2014 10:25:20 AM
Analyst: Data Type: Original

Replicate Data: K1412945-008DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 3.348 | 3.348 | 0.162 | 0.575 | 0.164 | | | 10:25:38 | Yes |
| 2 | 3.433 | 3.433 | 0.166 | 0.574 | 0.169 | | | 10:26:12 | Yes |
| 3 | 3.414 | 3.414 | 0.165 | 0.588 | 0.168 | | | 10:26:45 | Yes |
| Mean: | 3.398 | 3.398 | 0.165 | | | | | | |
| SD: | 0.0446 | 0.0446 | 0.0022 | | | | | | |
| %RSD: | 1.313 | 1.313 | 1.31 | | | | | | |

Sequence No.: 33 Autosampler Location: 28
Sample ID: K1412993-001 Date Collected: 12/4/2014 10:27:36 AM
Analyst: Data Type: Original

Replicate Data: K1412993-001

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.392 | 2.392 | 0.116 | 0.417 | 0.118 | | | 10:27:54 | Yes |
| 2 | 2.392 | 2.392 | 0.116 | 0.405 | 0.118 | | | 10:28:28 | Yes |
| 3 | 2.426 | 2.426 | 0.118 | 0.413 | 0.120 | | | 10:29:01 | Yes |
| Mean: | 2.403 | 2.403 | 0.116 | | | | | | |

SD: 0.0198 0.0198 0.0010
%RSD: 0.8231 0.8231 0.82

Sequence No.: 34

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 10:29:52 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.093 | 7.093 | 0.344 | 1.196 | 0.346 | | | 10:30:11 | Yes |
| 2 | 7.047 | 7.047 | 0.342 | 1.195 | 0.344 | | | 10:30:44 | Yes |
| 3 | 6.918 | 6.918 | 0.335 | 1.199 | 0.337 | | | 10:31:18 | Yes |
| Mean: | 7.019 | 7.019 | 0.340 | | | | | | |
| SD: | 0.0909 | 0.0909 | 0.0044 | | | | | | |
| %RSD: | 1.294 | 1.294 | 1.29 | | | | | | |

QC value within limits for As 193.70 Recovery = 93.59%

All analyte(s) passed QC.

Sequence No.: 35

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 10:32:08 AM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0913 | 0.0913 | 0.004 | 0.023 | 0.007 | | | 10:32:24 | Yes |
| 2 | 0.0315 | 0.0315 | 0.002 | -0.012 | 0.004 | | | 10:32:58 | Yes |
| 3 | 0.0498 | 0.0498 | 0.002 | 0.012 | 0.005 | | | 10:33:32 | Yes |
| Mean: | 0.0575 | 0.0575 | 0.003 | | | | | | |
| SD: | 0.0307 | 0.0307 | 0.0015 | | | | | | |
| %RSD: | 53.32 | 53.32 | 53.32 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 36

Autosampler Location: 29

Sample ID: K1412993-001D

Date Collected: 12/4/2014 10:34:20 AM

Analyst:

Data Type: Original

Replicate Data: K1412993-001D

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.315 | 2.315 | 0.112 | 0.400 | 0.114 | | | 10:34:39 | Yes |
| 2 | 2.311 | 2.311 | 0.112 | 0.369 | 0.114 | | | 10:35:13 | Yes |
| 3 | 2.358 | 2.358 | 0.114 | 0.403 | 0.116 | | | 10:35:47 | Yes |
| Mean: | 2.328 | 2.328 | 0.113 | | | | | | |
| SD: | 0.0260 | 0.0260 | 0.0013 | | | | | | |
| %RSD: | 1.116 | 1.116 | 1.12 | | | | | | |

Sequence No.: 37

Autosampler Location: 30

Sample ID: K1412993-001S

Date Collected: 12/4/2014 10:36:37 AM

Analyst:

Data Type: Original

Replicate Data: K1412993-001S

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.312 | 2.312 | 0.112 | 0.404 | 0.114 | | | 10:36:57 | Yes |
| 2 | 2.332 | 2.332 | 0.113 | 0.404 | 0.115 | | | 10:37:30 | Yes |
| 3 | 2.356 | 2.356 | 0.114 | 0.398 | 0.116 | | | 10:38:04 | Yes |
| Mean: | 2.333 | 2.333 | 0.113 | | | | | | |
| SD: | 0.0222 | 0.0222 | 0.0011 | | | | | | |

%RSD: 0.9520 0.9520 0.95

Sequence No.: 38

Sample ID: K1412993-002

Analyst:

Autosampler Location: 31

Date Collected: 12/4/2014 10:38:55 AM

Data Type: Original

Replicate Data: K1412993-002

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.380 | 2.380 | 0.115 | 0.417 | 0.118 | | | 10:39:14 | Yes |
| 2 | 2.434 | 2.434 | 0.118 | 0.408 | 0.120 | | | 10:39:48 | Yes |
| 3 | 2.364 | 2.364 | 0.115 | 0.395 | 0.117 | | | 10:40:22 | Yes |
| Mean: | 2.393 | 2.393 | 0.116 | | | | | | |
| SD: | 0.0368 | 0.0368 | 0.0018 | | | | | | |
| %RSD: | 1.536 | 1.536 | 1.54 | | | | | | |

Sequence No.: 39

Sample ID: K1412993-001DISS

Analyst:

Autosampler Location: 32

Date Collected: 12/4/2014 10:41:14 AM

Data Type: Original

Replicate Data: K1412993-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.330 | 2.330 | 0.113 | 0.413 | 0.115 | | | 10:41:29 | Yes |
| 2 | 2.354 | 2.354 | 0.114 | 0.403 | 0.116 | | | 10:42:03 | Yes |
| 3 | 2.302 | 2.302 | 0.112 | 0.373 | 0.114 | | | 10:42:37 | Yes |
| Mean: | 2.329 | 2.329 | 0.113 | | | | | | |
| SD: | 0.0258 | 0.0258 | 0.0013 | | | | | | |
| %RSD: | 1.108 | 1.108 | 1.11 | | | | | | |

Sequence No.: 40

Sample ID: K1412993-001DDISS

Analyst:

Autosampler Location: 33

Date Collected: 12/4/2014 10:43:24 AM

Data Type: Original

Replicate Data: K1412993-001DDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.091 | 2.091 | 0.101 | 0.349 | 0.104 | | | 10:43:40 | Yes |
| 2 | 2.134 | 2.134 | 0.103 | 0.365 | 0.106 | | | 10:44:14 | Yes |
| 3 | 2.161 | 2.161 | 0.105 | 0.377 | 0.107 | | | 10:44:47 | Yes |
| Mean: | 2.129 | 2.129 | 0.103 | | | | | | |
| SD: | 0.0357 | 0.0357 | 0.0017 | | | | | | |
| %RSD: | 1.679 | 1.679 | 1.68 | | | | | | |

Sequence No.: 41

Sample ID: K1412993-001SDISS

Analyst:

Autosampler Location: 34

Date Collected: 12/4/2014 10:45:35 AM

Data Type: Original

Replicate Data: K1412993-001SDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.216 | 2.216 | 0.107 | 0.389 | 0.110 | | | 10:45:51 | Yes |
| 2 | 2.248 | 2.248 | 0.109 | 0.386 | 0.111 | | | 10:46:25 | Yes |
| 3 | 2.214 | 2.214 | 0.107 | 0.386 | 0.109 | | | 10:46:59 | Yes |
| Mean: | 2.226 | 2.226 | 0.108 | | | | | | |
| SD: | 0.0195 | 0.0195 | 0.0009 | | | | | | |
| %RSD: | 0.8746 | 0.8746 | 0.87 | | | | | | |

Sequence No.: 42

Sample ID: K1412993-002DISS

Autosampler Location: 35

Date Collected: 12/4/2014 10:47:47 AM

Analyst:

Data Type: Original

Replicate Data: K1412993-002DISS

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 4.020 | 4.020 | 0.195 | 0.936 | 0.197 | | | 10:48:03 | Yes |
| 2 | 2.211 | 2.211 | 0.107 | 0.363 | 0.109 | | | 10:48:37 | Yes |
| 3 | 2.215 | 2.215 | 0.107 | 0.372 | 0.110 | | | 10:49:11 | Yes |
| Mean: | 2.815 | 2.815 | 0.136 | | | | | | |
| SD: | 1.043 | 1.043 | 0.0506 | | | | | | |
| %RSD: | 37.06 | 37.06 | 37.06 | | | | | | |

Sequence No.: 43

Autosampler Location: 36

Sample ID: K1413402-MB

Date Collected: 12/4/2014 10:49:59 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-MB

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0232 | 0.0232 | 0.001 | -0.006 | 0.003 | | | 10:50:16 | Yes |
| 2 | 0.0338 | 0.0338 | 0.002 | 0.011 | 0.004 | | | 10:50:50 | Yes |
| 3 | -0.0056 | -0.0056 | -0.000 | -0.002 | 0.002 | | | 10:51:23 | Yes |
| Mean: | 0.0171 | 0.0171 | 0.001 | | | | | | |
| SD: | 0.0204 | 0.0204 | 0.0010 | | | | | | |
| %RSD: | 118.9 | 118.9 | 118.88 | | | | | | |

Sequence No.: 44

Autosampler Location: 37

Sample ID: LCSWK1413402

Date Collected: 12/4/2014 10:52:12 AM

Analyst:

Data Type: Original

Replicate Data: LCSWK1413402

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 4.841 | 4.841 | 0.235 | 0.847 | 0.237 | | | 10:52:29 | Yes |
| 2 | 4.895 | 4.895 | 0.237 | 0.848 | 0.239 | | | 10:53:03 | Yes |
| 3 | 4.924 | 4.924 | 0.239 | 0.853 | 0.241 | | | 10:53:37 | Yes |
| Mean: | 4.886 | 4.886 | 0.237 | | | | | | |
| SD: | 0.0420 | 0.0420 | 0.0020 | | | | | | |
| %RSD: | 0.8603 | 0.8603 | 0.86 | | | | | | |

Sequence No.: 45

Autosampler Location: 38

Sample ID: K1413402-001

Date Collected: 12/4/2014 10:54:26 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-001

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.140 | 2.140 | 0.104 | 0.374 | 0.106 | | | 10:54:43 | Yes |
| 2 | 2.104 | 2.104 | 0.102 | 0.368 | 0.104 | | | 10:55:17 | Yes |
| 3 | 2.119 | 2.119 | 0.103 | 0.362 | 0.105 | | | 10:55:51 | Yes |
| Mean: | 2.121 | 2.121 | 0.103 | | | | | | |
| SD: | 0.0179 | 0.0179 | 0.0009 | | | | | | |
| %RSD: | 0.8430 | 0.8430 | 0.84 | | | | | | |

Sequence No.: 46

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 10:56:40 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|------|------|-------|-------|------|------|
|------|------------|---------|---------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|-------|--------|--------|--------|-------|--------|------|----------|--------|
| 1 | 7.691 | 7.691 | 0.373 | 1.338 | 0.375 | | 10:56:58 | Yes |
| 2 | 7.784 | 7.784 | 0.377 | 1.341 | 0.379 | | 10:57:33 | Yes |
| 3 | 7.521 | 7.521 | 0.365 | 1.351 | 0.367 | | 10:58:06 | Yes |
| Mean: | 7.665 | 7.665 | 0.372 | | | | | |
| SD: | 0.1333 | 0.1333 | 0.0065 | | | | | |
| %RSD: | 1.739 | 1.739 | 1.74 | | | | | |

QC value within limits for As 193.70 Recovery = 102.20%
All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 10:58:57 AM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1328 | 0.1328 | 0.006 | 0.035 | 0.009 | | | 10:59:13 | Yes |
| 2 | 0.0551 | 0.0551 | 0.003 | 0.006 | 0.005 | | | 10:59:47 | Yes |
| 3 | 0.0381 | 0.0381 | 0.002 | -0.005 | 0.004 | | | 11:00:21 | Yes |
| Mean: | 0.0754 | 0.0754 | 0.004 | | | | | | |
| SD: | 0.0505 | 0.0505 | 0.0024 | | | | | | |
| %RSD: | 66.99 | 66.99 | 66.99 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 48

Autosampler Location: 39

Sample ID: K1413402-002

Date Collected: 12/4/2014 11:01:10 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-002

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.884 | 2.884 | 0.140 | 0.505 | 0.142 | | | 11:01:27 | Yes |
| 2 | 2.835 | 2.835 | 0.137 | 0.489 | 0.140 | | | 11:02:01 | Yes |
| 3 | 2.897 | 2.897 | 0.140 | 0.501 | 0.143 | | | 11:02:35 | Yes |
| Mean: | 2.872 | 2.872 | 0.139 | | | | | | |
| SD: | 0.0326 | 0.0326 | 0.0016 | | | | | | |
| %RSD: | 1.135 | 1.135 | 1.13 | | | | | | |

Sequence No.: 49

Autosampler Location: 40

Sample ID: K1413402-002D

Date Collected: 12/4/2014 11:03:25 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-002D

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|--------------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.821 | 2.821 | 0.137 | 0.492 | 0.139 | | | 11:03:42 | Yes |
| 2 | 3.164 | 3.164 | 0.153 | 1.366 | 0.156 | | | 11:04:16 | Yes |
| 3 | 2.448 | 2.448 | 0.119 | 0.152 | 0.121 | | | 11:04:50 | Yes |
| Changing BOC | | | | | | | | | |
| Mean: | 2.811 | 2.811 | 0.136 | | | | | | |
| SD: | 0.3582 | 0.3582 | 0.0174 | | | | | | |
| %RSD: | 12.74 | 12.74 | 12.74 | | | | | | |
| Changing BOC | | | | | | | | | |

Sequence No.: 50

Autosampler Location: 41

Sample ID: K1413402-002S

Date Collected: 12/4/2014 11:05:39 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-002S

| Repl # | SampleConc ug/L | StdConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 3.514 | 3.514 | 0.170 | 0.593 | 0.172 | | | 11:05:57 | Yes |
| 2 | 3.473 | 3.473 | 0.168 | 0.604 | 0.170 | | | 11:06:31 | Yes |
| 3 | 3.464 | 3.464 | 0.168 | 0.600 | 0.170 | | | 11:07:05 | Yes |
| Mean: | 3.483 | 3.483 | 0.169 | | | | | | |
| SD: | 0.0270 | 0.0270 | 0.0013 | | | | | | |
| %RSD: | 0.7737 | 0.7737 | 0.77 | | | | | | |

Sequence No.: 51

Sample ID: K1413402-003

Analyst:

Autosampler Location: 42

Date Collected: 12/4/2014 11:07:55 AM

Data Type: Original

Replicate Data: K1413402-003

| Repl # | SampleConc ug/L | StdConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 2.109 | 2.109 | 0.102 | 0.346 | 0.104 | | | 11:08:13 | Yes |
| 2 | 2.127 | 2.127 | 0.103 | 0.365 | 0.105 | | | 11:08:46 | Yes |
| 3 | 2.122 | 2.122 | 0.103 | 0.366 | 0.105 | | | 11:09:20 | Yes |
| Mean: | 2.119 | 2.119 | 0.103 | | | | | | |
| SD: | 0.0092 | 0.0092 | 0.0004 | | | | | | |
| %RSD: | 0.4347 | 0.4347 | 0.43 | | | | | | |

Sequence No.: 52

Sample ID: K1413402-004

Analyst:

Autosampler Location: 43

Date Collected: 12/4/2014 11:10:10 AM

Data Type: Original

Replicate Data: K1413402-004

| Repl # | SampleConc ug/L | StdConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.1334 | 0.1334 | 0.006 | 0.028 | 0.009 | | | 11:10:29 | Yes |
| 2 | 0.1109 | 0.1109 | 0.005 | 0.019 | 0.008 | | | 11:11:02 | Yes |
| 3 | 0.1011 | 0.1011 | 0.005 | 0.014 | 0.007 | | | 11:11:36 | Yes |
| Mean: | 0.1151 | 0.1151 | 0.006 | | | | | | |
| SD: | 0.0166 | 0.0166 | 0.0008 | | | | | | |
| %RSD: | 14.38 | 14.38 | 14.38 | | | | | | |

Sequence No.: 53

Sample ID: K1413402-004A

Analyst:

Autosampler Location: 44

Date Collected: 12/4/2014 11:12:26 AM

Data Type: Original

Replicate Data: K1413402-004A

| Repl # | SampleConc ug/L | StdConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 4.856 | 4.856 | 0.235 | 0.841 | 0.238 | | | 11:12:44 | Yes |
| 2 | 4.808 | 4.808 | 0.233 | 0.841 | 0.235 | | | 11:13:18 | Yes |
| 3 | 4.841 | 4.841 | 0.235 | 0.854 | 0.237 | | | 11:13:53 | Yes |
| Mean: | 4.835 | 4.835 | 0.234 | | | | | | |
| SD: | 0.0245 | 0.0245 | 0.0012 | | | | | | |
| %RSD: | 0.5072 | 0.5072 | 0.51 | | | | | | |

Sequence No.: 54

Sample ID: K1413402-005

Analyst:

Autosampler Location: 45

Date Collected: 12/4/2014 11:14:43 AM

Data Type: Original

Replicate Data: K1413402-005

| Repl # | SampleConc ug/L | StdConc ug/L | Blncorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.694 | 1.694 | 0.082 | 0.308 | 0.084 | | | 11:15:02 | Yes |
| 2 | 1.668 | 1.668 | 0.081 | 0.295 | 0.083 | | | 11:15:36 | Yes |
| 3 | 1.641 | 1.641 | 0.080 | 0.294 | 0.082 | | | 11:16:10 | Yes |

Mean: 1.668 1.668 0.081
SD: 0.0266 0.0266 0.0013
%RSD: 1.596 1.596 1.60

Sequence No.: 55

Autosampler Location: 46

Sample ID: K1413402-006

Date Collected: 12/4/2014 11:17:00 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-006

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.882 | 1.882 | 0.091 | 0.331 | 0.093 | | | 11:17:19 | Yes |
| 2 | 1.926 | 1.926 | 0.093 | 0.339 | 0.096 | | | 11:17:53 | Yes |
| 3 | 1.861 | 1.861 | 0.090 | 0.332 | 0.092 | | | 11:18:27 | Yes |
| Mean: | 1.889 | 1.889 | 0.092 | | | | | | |
| SD: | 0.0332 | 0.0332 | 0.0016 | | | | | | |
| %RSD: | 1.756 | 1.756 | 1.76 | | | | | | |

Sequence No.: 56

Autosampler Location: 47

Sample ID: K1413402-007

Date Collected: 12/4/2014 11:19:18 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-007

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.982 | 1.982 | 0.096 | 0.337 | 0.098 | | | 11:19:37 | Yes |
| 2 | 1.980 | 1.980 | 0.096 | 0.350 | 0.098 | | | 11:20:11 | Yes |
| 3 | 1.926 | 1.926 | 0.093 | 0.347 | 0.096 | | | 11:20:44 | Yes |
| Mean: | 1.962 | 1.962 | 0.095 | | | | | | |
| SD: | 0.0318 | 0.0318 | 0.0015 | | | | | | |
| %RSD: | 1.621 | 1.621 | 1.62 | | | | | | |

Sequence No.: 57

Autosampler Location: 48

Sample ID: K1413402-008

Date Collected: 12/4/2014 11:21:36 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-008

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 2.728 | 2.728 | 0.132 | 0.471 | 0.134 | | | 11:21:51 | Yes |
| 2 | 2.690 | 2.690 | 0.130 | 0.467 | 0.133 | | | 11:22:25 | Yes |
| 3 | 2.717 | 2.717 | 0.132 | 0.481 | 0.134 | | | 11:22:59 | Yes |
| Mean: | 2.711 | 2.711 | 0.131 | | | | | | |
| SD: | 0.0197 | 0.0197 | 0.0010 | | | | | | |
| %RSD: | 0.7278 | 0.7278 | 0.73 | | | | | | |

Sequence No.: 58

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 11:23:46 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.536 | 7.536 | 0.365 | 1.351 | 0.367 | | | 11:24:04 | Yes |
| 2 | 8.075 | 8.075 | 0.391 | 1.615 | 0.394 | | | 11:24:38 | Yes |
| 3 | 7.569 | 7.569 | 0.367 | 1.268 | 0.369 | | | 11:25:12 | Yes |
| Mean: | 7.727 | 7.727 | 0.374 | | | | | | |
| SD: | 0.3022 | 0.3022 | 0.0146 | | | | | | |
| %RSD: | 3.911 | 3.911 | 3.91 | | | | | | |

QC value within limits for As 193.70 Recovery = 103.02%
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 12/4/2014 11:26:02 AM

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1229 | 0.1229 | 0.006 | 0.025 | 0.008 | | | 11:26:18 | Yes |
| 2 | 0.0821 | 0.0821 | 0.004 | -0.007 | 0.006 | | | 11:26:52 | Yes |
| 3 | 0.0373 | 0.0373 | 0.002 | -0.004 | 0.004 | | | 11:27:26 | Yes |
| Mean: | 0.0808 | 0.0808 | 0.004 | | | | | | |
| SD: | 0.0428 | 0.0428 | 0.0021 | | | | | | |
| %RSD: | 52.98 | 52.98 | 52.98 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 60

Sample ID: K1413402-009

Analyst:

Autosampler Location: 49

Date Collected: 12/4/2014 11:28:14 AM

Data Type: Original

Replicate Data: K1413402-009

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1419 | 0.1419 | 0.007 | 0.084 | 0.009 | | | 11:28:30 | Yes |
| 2 | 0.1363 | 0.1363 | 0.007 | 0.028 | 0.009 | | | 11:29:04 | Yes |
| 3 | 0.1113 | 0.1113 | 0.005 | 0.026 | 0.008 | | | 11:29:38 | Yes |
| Mean: | 0.1298 | 0.1298 | 0.006 | | | | | | |
| SD: | 0.0163 | 0.0163 | 0.0008 | | | | | | |
| %RSD: | 12.53 | 12.53 | 12.53 | | | | | | |

Sequence No.: 61

Sample ID: K1413402-010

Analyst:

Autosampler Location: 50

Date Collected: 12/4/2014 11:30:26 AM

Data Type: Original

Replicate Data: K1413402-010

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.036 | 2.036 | 0.099 | 0.360 | 0.101 | | | 11:30:42 | Yes |
| 2 | 2.026 | 2.026 | 0.098 | 0.356 | 0.100 | | | 11:31:15 | Yes |
| 3 | 1.978 | 1.978 | 0.096 | 0.357 | 0.098 | | | 11:31:49 | Yes |
| Mean: | 2.013 | 2.013 | 0.098 | | | | | | |
| SD: | 0.0312 | 0.0312 | 0.0015 | | | | | | |
| %RSD: | 1.549 | 1.549 | 1.55 | | | | | | |

Sequence No.: 62

Sample ID: K1413402-001DISS

Analyst:

Autosampler Location: 51

Date Collected: 12/4/2014 11:32:37 AM

Data Type: Original

Replicate Data: K1413402-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.429 | 2.429 | 0.118 | 0.438 | 0.120 | | | 11:32:54 | Yes |
| 2 | 2.462 | 2.462 | 0.119 | 0.433 | 0.121 | | | 11:33:27 | Yes |
| 3 | 2.402 | 2.402 | 0.116 | 0.436 | 0.119 | | | 11:34:01 | Yes |
| Mean: | 2.431 | 2.431 | 0.118 | | | | | | |
| SD: | 0.0301 | 0.0301 | 0.0015 | | | | | | |
| %RSD: | 1.237 | 1.237 | 1.24 | | | | | | |

Sequence No.: 63

Autosampler Location: 52

Sample ID: K1413402-002DISS
Analyst:

Date Collected: 12/4/2014 11:34:50 AM
Data Type: Original

Replicate Data: K1413402-002DISS

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|-----------|--------------------|------------------|-------------------|--------------|----------------|---------------|-----------------|----------|----------------|
| 1 | 2.622 | 2.622 | 0.127 | 0.476 | 0.129 | | | 11:35:06 | Yes |
| 2 | 2.551 | 2.551 | 0.124 | 0.465 | 0.126 | | | 11:35:40 | Yes |
| 3 | 2.679 | 2.679 | 0.130 | 0.469 | 0.132 | | | 11:36:14 | Yes |
| Mean: | 2.617 | 2.617 | 0.127 | | | | | | |
| SD: | 0.0642 | 0.0642 | 0.0031 | | | | | | |
| %RSD: | 2.454 | 2.454 | 2.45 | | | | | | |

Sequence No.: 64
Sample ID: K1413402-002DDISS
Analyst:

Autosampler Location: 53
Date Collected: 12/4/2014 11:37:03 AM
Data Type: Original

Replicate Data: K1413402-002DDISS

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|-----------|--------------------|------------------|-------------------|--------------|----------------|---------------|-----------------|----------|----------------|
| 1 | 2.803 | 2.803 | 0.136 | 0.454 | 0.138 | | | 11:37:19 | Yes |
| 2 | 2.714 | 2.714 | 0.132 | 0.489 | 0.134 | | | 11:37:53 | Yes |
| 3 | 2.741 | 2.741 | 0.133 | 0.481 | 0.135 | | | 11:38:26 | Yes |
| Mean: | 2.752 | 2.752 | 0.133 | | | | | | |
| SD: | 0.0455 | 0.0455 | 0.0022 | | | | | | |
| %RSD: | 1.653 | 1.653 | 1.65 | | | | | | |

Sequence No.: 65
Sample ID: K1413402-002SDISS
Analyst:

Autosampler Location: 54
Date Collected: 12/4/2014 11:39:15 AM
Data Type: Original

Replicate Data: K1413402-002SDISS

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|-----------|--------------------|------------------|-------------------|--------------|----------------|---------------|-----------------|----------|----------------|
| 1 | 3.499 | 3.499 | 0.170 | 0.606 | 0.172 | | | 11:39:32 | Yes |
| 2 | 3.391 | 3.391 | 0.164 | 0.599 | 0.167 | | | 11:40:06 | Yes |
| 3 | 3.431 | 3.431 | 0.166 | 0.605 | 0.168 | | | 11:40:40 | Yes |
| Mean: | 3.440 | 3.440 | 0.167 | | | | | | |
| SD: | 0.0548 | 0.0548 | 0.0027 | | | | | | |
| %RSD: | 1.592 | 1.592 | 1.59 | | | | | | |

Sequence No.: 66
Sample ID: K1413402-003DISS
Analyst:

Autosampler Location: 55
Date Collected: 12/4/2014 11:41:29 AM
Data Type: Original

Replicate Data: K1413402-003DISS

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|-----------|--------------------|------------------|-------------------|--------------|----------------|---------------|-----------------|----------|----------------|
| 1 | 2.458 | 2.458 | 0.119 | 0.435 | 0.121 | | | 11:41:46 | Yes |
| 2 | 2.603 | 2.603 | 0.126 | 0.447 | 0.128 | | | 11:42:20 | Yes |
| 3 | 2.490 | 2.490 | 0.121 | 0.450 | 0.123 | | | 11:42:54 | Yes |
| Mean: | 2.517 | 2.517 | 0.122 | | | | | | |
| SD: | 0.0763 | 0.0763 | 0.0037 | | | | | | |
| %RSD: | 3.033 | 3.033 | 3.03 | | | | | | |

Sequence No.: 67
Sample ID: K1413402-004DISS
Analyst:

Autosampler Location: 56
Date Collected: 12/4/2014 11:43:43 AM
Data Type: Original

Replicate Data: K1413402-004DISS

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.0977 | 0.0977 | 0.005 | 0.023 | 0.007 | | | 11:44:01 | Yes |
| 2 | 0.0908 | 0.0908 | 0.004 | 0.019 | 0.007 | | | 11:44:34 | Yes |
| 3 | 0.0932 | 0.0932 | 0.005 | 0.021 | 0.007 | | | 11:45:08 | Yes |
| Mean: | 0.0939 | 0.0939 | 0.005 | | | | | | |
| SD: | 0.0035 | 0.0035 | 0.0002 | | | | | | |
| %RSD: | 3.753 | 3.753 | 3.75 | | | | | | |

Sequence No.: 68

Autosampler Location: 57

Sample ID: K1413402-005DISS

Date Collected: 12/4/2014 11:45:57 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-005DISS

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 1.323 | 1.323 | 0.064 | 0.239 | 0.066 | | | 11:46:15 | Yes |
| 2 | 1.396 | 1.396 | 0.068 | 0.243 | 0.070 | | | 11:46:49 | Yes |
| 3 | 1.365 | 1.365 | 0.066 | 0.237 | 0.068 | | | 11:47:22 | Yes |
| Mean: | 1.361 | 1.361 | 0.066 | | | | | | |
| SD: | 0.0362 | 0.0362 | 0.0018 | | | | | | |
| %RSD: | 2.663 | 2.663 | 2.66 | | | | | | |

Sequence No.: 69

Autosampler Location: 58

Sample ID: K1413402-006DISS

Date Collected: 12/4/2014 11:48:12 AM

Analyst:

Data Type: Original

Replicate Data: K1413402-006DISS

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 2.008 | 2.008 | 0.097 | 0.368 | 0.100 | | | 11:48:30 | Yes |
| 2 | 1.983 | 1.983 | 0.096 | 0.368 | 0.098 | | | 11:49:04 | Yes |
| 3 | 2.068 | 2.068 | 0.100 | 0.369 | 0.102 | | | 11:49:37 | Yes |
| Mean: | 2.020 | 2.020 | 0.098 | | | | | | |
| SD: | 0.0438 | 0.0438 | 0.0021 | | | | | | |
| %RSD: | 2.168 | 2.168 | 2.17 | | | | | | |

Sequence No.: 70

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 11:50:28 AM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.678 | 7.678 | 0.372 | 1.368 | 0.374 | | | 11:50:46 | Yes |
| 2 | 7.736 | 7.736 | 0.375 | 1.447 | 0.377 | | | 11:51:19 | Yes |
| 3 | 7.616 | 7.616 | 0.369 | 1.349 | 0.371 | | | 11:51:53 | Yes |
| Mean: | 7.677 | 7.677 | 0.372 | | | | | | |
| SD: | 0.0603 | 0.0603 | 0.0029 | | | | | | |
| %RSD: | 0.7857 | 0.7857 | 0.79 | | | | | | |

Changing BOC

QC value within limits for As 193.70 Recovery = 102.36%

All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 11:52:44 AM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdndConc | BlndCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|-----------|----------|------|------|-------|-------|------|------|
|------|------------|-----------|----------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|-------|--------|--------|--------|--------|--------|------|----------|--------|
| 1 | 0.1270 | 0.1270 | 0.006 | 0.010 | 0.008 | | 11:53:00 | Yes |
| 2 | 0.0590 | 0.0590 | 0.003 | -0.019 | 0.005 | | 11:53:34 | Yes |
| 3 | 0.0501 | 0.0501 | 0.002 | 0.010 | 0.005 | | 11:54:07 | Yes |
| Mean: | 0.0787 | 0.0787 | 0.004 | | | | | |
| SD: | 0.0421 | 0.0421 | 0.0020 | | | | | |
| %RSD: | 53.49 | 53.49 | 53.49 | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72 Autosampler Location: 59
Sample ID: K1413402-007DISS Date Collected: 12/4/2014 11:54:56 AM
Analyst: Data Type: Original

Replicate Data: K1413402-007DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.533 | 1.533 | 0.074 | 0.270 | 0.076 | | | 11:55:14 | Yes |
| 2 | 1.574 | 1.574 | 0.076 | 0.255 | 0.078 | | | 11:55:48 | Yes |
| 3 | 1.547 | 1.547 | 0.075 | 0.281 | 0.077 | | | 11:56:22 | Yes |
| Mean: | 1.552 | 1.552 | 0.075 | | | | | | |
| SD: | 0.0209 | 0.0209 | 0.0010 | | | | | | |
| %RSD: | 1.345 | 1.345 | 1.35 | | | | | | |

Sequence No.: 73 Autosampler Location: 60
Sample ID: K1413402-008DISS Date Collected: 12/4/2014 11:57:13 AM
Analyst: Data Type: Original

Replicate Data: K1413402-008DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.234 | 2.234 | 0.108 | 0.415 | 0.110 | | | 11:57:31 | Yes |
| 2 | 2.321 | 2.321 | 0.112 | 0.408 | 0.115 | | | 11:58:05 | Yes |
| 3 | 2.458 | 2.458 | 0.119 | 0.419 | 0.121 | | | 11:58:39 | Yes |
| Mean: | 2.338 | 2.338 | 0.113 | | | | | | |
| SD: | 0.1130 | 0.1130 | 0.0055 | | | | | | |
| %RSD: | 4.834 | 4.834 | 4.83 | | | | | | |

Sequence No.: 74 Autosampler Location: 61
Sample ID: K1413402-009DISS Date Collected: 12/4/2014 11:59:29 AM
Analyst: Data Type: Original

Replicate Data: K1413402-009DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1384 | 0.1384 | 0.007 | 0.027 | 0.009 | | | 11:59:48 | Yes |
| 2 | 0.1190 | 0.1190 | 0.006 | 0.021 | 0.008 | | | 12:00:21 | Yes |
| 3 | -0.0040 | -0.0040 | -0.000 | -0.072 | 0.002 | | | 12:00:55 | Yes |
| Mean: | 0.0844 | 0.0844 | 0.004 | | | | | | |
| SD: | 0.0772 | 0.0772 | 0.0037 | | | | | | |
| %RSD: | 91.45 | 91.45 | 91.45 | | | | | | |

Sequence No.: 75 Autosampler Location: 62
Sample ID: K1413402-010DISS Date Collected: 12/4/2014 12:01:46 PM
Analyst: Data Type: Original

Replicate Data: K1413402-010DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.531 | 1.531 | 0.074 | 0.275 | 0.076 | | | 12:02:05 | Yes |
| 2 | 1.544 | 1.544 | 0.075 | 0.241 | 0.077 | | | 12:02:39 | Yes |

| | | | | | | | |
|-------|--------|--------|--------|-------|-------|----------|-----|
| 3 | 1.566 | 1.566 | 0.076 | 0.237 | 0.078 | 12:03:13 | Yes |
| Mean: | 1.547 | 1.547 | 0.075 | | | | |
| SD: | 0.0180 | 0.0180 | 0.0009 | | | | |
| %RSD: | 1.166 | 1.166 | 1.17 | | | | |

Sequence No.: 76

Autosampler Location: 63

Sample ID: K1413380-MB

Date Collected: 12/4/2014 12:04:04 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-MB

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0243 | 0.0243 | 0.001 | 0.013 | 0.003 | | | 12:04:19 | Yes |
| 2 | 0.0094 | 0.0094 | 0.000 | -0.020 | 0.003 | | | 12:04:53 | Yes |
| 3 | -0.0007 | -0.0007 | -0.000 | -0.018 | 0.002 | | | 12:05:26 | Yes |
| Mean: | 0.0110 | 0.0110 | 0.001 | | | | | | |
| SD: | 0.0126 | 0.0126 | 0.0006 | | | | | | |
| %RSD: | 114.3 | 114.3 | 114.26 | | | | | | |

Sequence No.: 77

Autosampler Location: 64

Sample ID: LCSWK1413380

Date Collected: 12/4/2014 12:06:14 PM

Analyst:

Data Type: Original

Replicate Data: LCSWK1413380

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 4.927 | 4.927 | 0.239 | 0.858 | 0.241 | | | 12:06:29 | Yes |
| 2 | 4.799 | 4.799 | 0.233 | 0.868 | 0.235 | | | 12:07:04 | Yes |
| 3 | 5.039 | 5.039 | 0.244 | 0.875 | 0.246 | | | 12:07:37 | Yes |
| Mean: | 4.922 | 4.922 | 0.239 | | | | | | |
| SD: | 0.1204 | 0.1204 | 0.0058 | | | | | | |
| %RSD: | 2.446 | 2.446 | 2.45 | | | | | | |

Sequence No.: 78

Autosampler Location: 65

Sample ID: K1413380-001

Date Collected: 12/4/2014 12:08:25 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-001

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.2180 | 0.2180 | 0.011 | 0.040 | 0.013 | | | 12:08:41 | Yes |
| 2 | 0.2010 | 0.2010 | 0.010 | 0.037 | 0.012 | | | 12:09:15 | Yes |
| 3 | 0.1586 | 0.1586 | 0.008 | 0.031 | 0.010 | | | 12:09:48 | Yes |
| Mean: | 0.1925 | 0.1925 | 0.009 | | | | | | |
| SD: | 0.0306 | 0.0306 | 0.0015 | | | | | | |
| %RSD: | 15.89 | 15.89 | 15.89 | | | | | | |

Sequence No.: 79

Autosampler Location: 66

Sample ID: K1413380-002

Date Collected: 12/4/2014 12:10:37 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-002

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.776 | 1.776 | 0.086 | 0.318 | 0.088 | | | 12:10:53 | Yes |
| 2 | 1.752 | 1.752 | 0.085 | 0.310 | 0.087 | | | 12:11:26 | Yes |
| 3 | 1.762 | 1.762 | 0.085 | 0.325 | 0.088 | | | 12:12:00 | Yes |
| Mean: | 1.764 | 1.764 | 0.085 | | | | | | |
| SD: | 0.0120 | 0.0120 | 0.0006 | | | | | | |
| %RSD: | 0.6812 | 0.6812 | 0.68 | | | | | | |

Sequence No.: 80

Autosampler Location: 67

Sample ID: K1413380-003

Date Collected: 12/4/2014 12:12:48 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-003

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.4854 | 0.4854 | 0.024 | 0.093 | 0.026 | | | 12:13:04 | Yes |
| 2 | 0.6730 | 0.6730 | 0.033 | 0.215 | 0.035 | | | 12:13:38 | Yes |
| Changing BOC | | | | | | | | | |
| 3 | 0.4661 | 0.4661 | 0.023 | 0.071 | 0.025 | | | 12:14:12 | Yes |
| Mean: | 0.5415 | 0.5415 | 0.026 | | | | | | |
| SD: | 0.1143 | 0.1143 | 0.0055 | | | | | | |
| %RSD: | 21.11 | 21.11 | 21.11 | | | | | | |
| Changing BOC | | | | | | | | | |

Sequence No.: 81

Autosampler Location: 68

Sample ID: K1413380-003A

Date Collected: 12/4/2014 12:15:00 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-003A

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 5.166 | 5.166 | 0.250 | 0.913 | 0.253 | | | 12:15:17 | Yes |
| 2 | 5.292 | 5.292 | 0.256 | 0.906 | 0.259 | | | 12:15:51 | Yes |
| 3 | 5.122 | 5.122 | 0.248 | 0.855 | 0.250 | | | 12:16:27 | Yes |
| Mean: | 5.193 | 5.193 | 0.252 | | | | | | |
| SD: | 0.0883 | 0.0883 | 0.0043 | | | | | | |
| %RSD: | 1.700 | 1.700 | 1.70 | | | | | | |

Sequence No.: 82

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 12:17:15 PM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 7.646 | 7.646 | 0.371 | 1.372 | 0.373 | | | 12:17:33 | Yes |
| 2 | 7.706 | 7.706 | 0.373 | 1.371 | 0.376 | | | 12:18:07 | Yes |
| 3 | 7.597 | 7.597 | 0.368 | 1.365 | 0.370 | | | 12:18:41 | Yes |
| Mean: | 7.650 | 7.650 | 0.371 | | | | | | |
| SD: | 0.0542 | 0.0542 | 0.0026 | | | | | | |
| %RSD: | 0.7086 | 0.7086 | 0.71 | | | | | | |

QC value within limits for As 193.70 Recovery = 101.99%

All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 12:19:32 PM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl # | SampleConc ug/L | StdndConc ug/L | BlndCorr Signal | Peak Area | Peak Height | Bkgnd Area | Bkgnd Height | Time | Peak Stored |
|--------|-----------------|----------------|-----------------|-----------|-------------|------------|--------------|----------|-------------|
| 1 | 0.1469 | 0.1469 | 0.007 | 0.023 | 0.009 | | | 12:19:48 | Yes |
| 2 | 0.0955 | 0.0955 | 0.005 | 0.019 | 0.007 | | | 12:20:22 | Yes |
| 3 | 0.0436 | 0.0436 | 0.002 | 0.015 | 0.004 | | | 12:20:56 | Yes |
| Mean: | 0.0954 | 0.0954 | 0.005 | | | | | | |
| SD: | 0.0517 | 0.0517 | 0.0025 | | | | | | |
| %RSD: | 54.17 | 54.17 | 54.17 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 84
Sample ID: K1413380-003D
Analyst:

Autosampler Location: 69
Date Collected: 12/4/2014 12:21:44 PM
Data Type: Original

Replicate Data: K1413380-003D

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.4783 | 0.4783 | 0.023 | 0.094 | 0.025 | | | 12:22:01 | Yes |
| 2 | 0.4613 | 0.4613 | 0.022 | 0.075 | 0.025 | | | 12:22:35 | Yes |
| 3 | 0.4781 | 0.4781 | 0.023 | 0.094 | 0.025 | | | 12:23:09 | Yes |
| Mean: | 0.4725 | 0.4725 | 0.023 | | | | | | |
| SD: | 0.0097 | 0.0097 | 0.0005 | | | | | | |
| %RSD: | 2.062 | 2.062 | 2.06 | | | | | | |

Sequence No.: 85
Sample ID: K1413380-003S
Analyst:

Autosampler Location: 70
Date Collected: 12/4/2014 12:23:57 PM
Data Type: Original

Replicate Data: K1413380-003S

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 8.462 | 8.462 | 0.410 | 1.502 | 0.412 | | | 12:24:14 | Yes |
| 2 | 8.545 | 8.545 | 0.414 | 1.841 | 0.416 | | | 12:24:48 | Yes |
| 3 | 8.592 | 8.592 | 0.416 | 1.511 | 0.419 | | | 12:25:22 | Yes |
| Mean: | 8.533 | 8.533 | 0.414 | | | | | | |
| SD: | 0.0661 | 0.0661 | 0.0032 | | | | | | |
| %RSD: | 0.7744 | 0.7744 | 0.77 | | | | | | |

Sequence No.: 86
Sample ID: K1413380-004
Analyst:

Autosampler Location: 71
Date Collected: 12/4/2014 12:26:11 PM
Data Type: Original

Replicate Data: K1413380-004

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.249 | 2.249 | 0.109 | 0.392 | 0.111 | | | 12:26:28 | Yes |
| 2 | 2.138 | 2.138 | 0.104 | 0.383 | 0.106 | | | 12:27:02 | Yes |
| 3 | 2.159 | 2.159 | 0.105 | 0.393 | 0.107 | | | 12:27:35 | Yes |
| Mean: | 2.182 | 2.182 | 0.106 | | | | | | |
| SD: | 0.0588 | 0.0588 | 0.0029 | | | | | | |
| %RSD: | 2.697 | 2.697 | 2.70 | | | | | | |

Sequence No.: 87
Sample ID: K1413380-005
Analyst:

Autosampler Location: 72
Date Collected: 12/4/2014 12:28:25 PM
Data Type: Original

Replicate Data: K1413380-005

| Repl | SampleConc | StndConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.200 | 2.200 | 0.107 | 0.383 | 0.109 | | | 12:28:42 | Yes |
| 2 | 2.113 | 2.113 | 0.102 | 0.381 | 0.105 | | | 12:29:16 | Yes |
| 3 | 2.148 | 2.148 | 0.104 | 0.389 | 0.106 | | | 12:29:50 | Yes |
| Mean: | 2.154 | 2.154 | 0.104 | | | | | | |
| SD: | 0.0437 | 0.0437 | 0.0021 | | | | | | |
| %RSD: | 2.030 | 2.030 | 2.03 | | | | | | |

Sequence No.: 88
Sample ID: K1413380-006
Analyst:

Autosampler Location: 73
Date Collected: 12/4/2014 12:30:39 PM
Data Type: Original

Replicate Data: K1413380-006

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1112 | 0.1112 | 0.005 | 0.052 | 0.008 | | | 12:30:57 | Yes |
| 2 | 0.0110 | 0.0110 | 0.001 | -0.002 | 0.003 | | | 12:31:30 | Yes |
| 3 | 0.0187 | 0.0187 | 0.001 | 0.002 | 0.003 | | | 12:32:04 | Yes |
| Mean: | 0.0470 | 0.0470 | 0.002 | | | | | | |
| SD: | 0.0557 | 0.0557 | 0.0027 | | | | | | |
| %RSD: | 118.7 | 118.7 | 118.70 | | | | | | |

Sequence No.: 89

Sample ID: K1413380-007

Analyst:

Autosampler Location: 74

Date Collected: 12/4/2014 12:32:54 PM

Data Type: Original

Replicate Data: K1413380-007

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.957 | 1.957 | 0.095 | 0.357 | 0.097 | | | 12:33:12 | Yes |
| 2 | 2.003 | 2.003 | 0.097 | 0.358 | 0.099 | | | 12:33:46 | Yes |
| 3 | 1.971 | 1.971 | 0.096 | 0.357 | 0.098 | | | 12:34:19 | Yes |
| Mean: | 1.977 | 1.977 | 0.096 | | | | | | |
| SD: | 0.0236 | 0.0236 | 0.0011 | | | | | | |
| %RSD: | 1.193 | 1.193 | 1.19 | | | | | | |

Sequence No.: 90

Sample ID: K1413380-001DISS

Analyst:

Autosampler Location: 75

Date Collected: 12/4/2014 12:35:09 PM

Data Type: Original

Replicate Data: K1413380-001DISS

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1440 | 0.1440 | 0.007 | 0.038 | 0.009 | | | 12:35:28 | Yes |
| 2 | 0.1236 | 0.1236 | 0.006 | 0.023 | 0.008 | | | 12:36:01 | Yes |
| 3 | 0.1330 | 0.1330 | 0.006 | 0.035 | 0.009 | | | 12:36:35 | Yes |
| Mean: | 0.1335 | 0.1335 | 0.006 | | | | | | |
| SD: | 0.0102 | 0.0102 | 0.0005 | | | | | | |
| %RSD: | 7.650 | 7.650 | 7.65 | | | | | | |

Sequence No.: 91

Sample ID: K1413380-002DISS

Analyst:

Autosampler Location: 76

Date Collected: 12/4/2014 12:37:25 PM

Data Type: Original

Replicate Data: K1413380-002DISS

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.616 | 1.616 | 0.078 | 0.292 | 0.080 | | | 12:37:44 | Yes |
| 2 | 1.614 | 1.614 | 0.078 | 0.293 | 0.080 | | | 12:38:18 | Yes |
| 3 | 1.595 | 1.595 | 0.077 | 0.289 | 0.080 | | | 12:38:51 | Yes |
| Mean: | 1.608 | 1.608 | 0.078 | | | | | | |
| SD: | 0.0112 | 0.0112 | 0.0005 | | | | | | |
| %RSD: | 0.6985 | 0.6985 | 0.70 | | | | | | |

Sequence No.: 92

Sample ID: K1413380-003DISS

Analyst:

Autosampler Location: 77

Date Collected: 12/4/2014 12:39:42 PM

Data Type: Original

Replicate Data: K1413380-003DISS

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|------|--------|-------|--------|------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |

| | | | | | | | |
|-------|--------|--------|--------|-------|-------|----------|-----|
| 1 | 0.4429 | 0.4429 | 0.021 | 0.082 | 0.024 | 12:40:01 | Yes |
| 2 | 0.4111 | 0.4111 | 0.020 | 0.089 | 0.022 | 12:40:35 | Yes |
| 3 | 0.4463 | 0.4463 | 0.022 | 0.081 | 0.024 | 12:41:09 | Yes |
| Mean: | 0.4334 | 0.4334 | 0.021 | | | | |
| SD: | 0.0194 | 0.0194 | 0.0009 | | | | |
| %RSD: | 4.485 | 4.485 | 4.49 | | | | |

Sequence No.: 93

Autosampler Location: 78

Sample ID: K1413380-003DDISS

Date Collected: 12/4/2014 12:42:00 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-003DDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.3700 | 0.3700 | 0.018 | 0.044 | 0.020 | | | 12:42:15 | Yes |
| 2 | 0.3791 | 0.3791 | 0.018 | 0.066 | 0.021 | | | 12:42:49 | Yes |
| 3 | 0.4082 | 0.4082 | 0.020 | 0.067 | 0.022 | | | 12:43:23 | Yes |
| Mean: | 0.3858 | 0.3858 | 0.019 | | | | | | |
| SD: | 0.0200 | 0.0200 | 0.0010 | | | | | | |
| %RSD: | 5.173 | 5.173 | 5.17 | | | | | | |

Sequence No.: 94

Autosampler Location: 5

Sample ID: CCV

Date Collected: 12/4/2014 12:44:10 PM

Analyst:

Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.801 | 7.801 | 0.378 | 1.378 | 0.380 | | | 12:44:28 | Yes |
| 2 | 7.713 | 7.713 | 0.374 | 1.381 | 0.376 | | | 12:45:02 | Yes |
| 3 | 7.754 | 7.754 | 0.376 | 1.409 | 0.378 | | | 12:45:36 | Yes |
| Mean: | 7.756 | 7.756 | 0.376 | | | | | | |
| SD: | 0.0439 | 0.0439 | 0.0021 | | | | | | |
| %RSD: | 0.5664 | 0.5664 | 0.57 | | | | | | |

QC value within limits for As 193.70 Recovery = 103.41%

All analyte(s) passed QC.

Sequence No.: 95

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 12:46:35 PM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1557 | 0.1557 | 0.008 | 0.035 | 0.010 | | | 12:46:51 | Yes |
| 2 | 0.0996 | 0.0996 | 0.005 | 0.013 | 0.007 | | | 12:47:25 | Yes |
| 3 | 0.0524 | 0.0524 | 0.003 | 0.011 | 0.005 | | | 12:47:59 | Yes |
| Mean: | 0.1026 | 0.1026 | 0.005 | | | | | | |
| SD: | 0.0517 | 0.0517 | 0.0025 | | | | | | |
| %RSD: | 50.42 | 50.42 | 50.42 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 96

Autosampler Location: 79

Sample ID: K1413380-003SDISS

Date Collected: 12/4/2014 12:48:48 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-003SDISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 7.897 | 7.897 | 0.383 | 1.431 | 0.385 | | | 12:49:04 | Yes |

| | | | | | | | |
|-------|--------|--------|--------|-------|-------|----------|-----|
| 2 | 8.440 | 8.440 | 0.409 | 1.456 | 0.411 | 12:49:38 | Yes |
| 3 | 8.173 | 8.173 | 0.396 | 1.536 | 0.398 | 12:50:12 | Yes |
| Mean: | 8.170 | 8.170 | 0.396 | | | | |
| SD: | 0.2714 | 0.2714 | 0.0132 | | | | |
| %RSD: | 3.322 | 3.322 | 3.32 | | | | |

Sequence No.: 97

Autosampler Location: 80

Sample ID: K1413380-004DISS

Date Collected: 12/4/2014 12:51:00 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-004DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.236 | 2.236 | 0.108 | 0.416 | 0.111 | | | 12:51:15 | Yes |
| 2 | 2.232 | 2.232 | 0.108 | 0.416 | 0.110 | | | 12:51:49 | Yes |
| 3 | 2.247 | 2.247 | 0.109 | 0.394 | 0.111 | | | 12:52:23 | Yes |
| Mean: | 2.238 | 2.238 | 0.108 | | | | | | |
| SD: | 0.0076 | 0.0076 | 0.0004 | | | | | | |
| %RSD: | 0.3383 | 0.3383 | 0.34 | | | | | | |

Sequence No.: 98

Autosampler Location: 81

Sample ID: K1413380-005DISS

Date Collected: 12/4/2014 12:53:11 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-005DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 2.505 | 2.505 | 0.121 | 0.459 | 0.124 | | | 12:53:27 | Yes |
| 2 | 2.721 | 2.721 | 0.132 | 0.475 | 0.134 | | | 12:54:00 | Yes |
| 3 | 2.565 | 2.565 | 0.124 | 0.463 | 0.127 | | | 12:54:34 | Yes |
| Mean: | 2.597 | 2.597 | 0.126 | | | | | | |
| SD: | 0.1112 | 0.1112 | 0.0054 | | | | | | |
| %RSD: | 4.280 | 4.280 | 4.28 | | | | | | |

Sequence No.: 99

Autosampler Location: 82

Sample ID: K1413380-006DISS

Date Collected: 12/4/2014 12:55:22 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-006DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | -0.0008 | -0.0008 | -0.000 | -0.037 | 0.002 | | | 12:55:38 | Yes |
| 2 | 0.0333 | 0.0333 | 0.002 | 0.009 | 0.004 | | | 12:56:12 | Yes |
| 3 | 0.0235 | 0.0235 | 0.001 | 0.008 | 0.003 | | | 12:56:46 | Yes |
| Mean: | 0.0187 | 0.0187 | 0.001 | | | | | | |
| SD: | 0.0175 | 0.0175 | 0.0008 | | | | | | |
| %RSD: | 93.80 | 93.80 | 93.80 | | | | | | |

Sequence No.: 100

Autosampler Location: 83

Sample ID: K1413380-007DISS

Date Collected: 12/4/2014 12:57:34 PM

Analyst:

Data Type: Original

Replicate Data: K1413380-007DISS

| Repl | SampleConc | StndConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|----------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 1.815 | 1.815 | 0.088 | 0.337 | 0.090 | | | 12:57:51 | Yes |
| 2 | 1.819 | 1.819 | 0.088 | 0.335 | 0.090 | | | 12:58:24 | Yes |
| 3 | 1.790 | 1.790 | 0.087 | 0.323 | 0.089 | | | 12:58:59 | Yes |
| Mean: | 1.808 | 1.808 | 0.088 | | | | | | |
| SD: | 0.0160 | 0.0160 | 0.0008 | | | | | | |
| %RSD: | 0.8860 | 0.8860 | 0.89 | | | | | | |

Sequence No.: 101
Sample ID: K1412945-001DISS
Analyst:

Autosampler Location: 84
Date Collected: 12/4/2014 12:59:47 PM
Data Type: Original

Replicate Data: K1412945-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.0367 | 0.0367 | 0.002 | 0.012 | 0.004 | | | 13:00:04 | Yes |
| 2 | 0.0265 | 0.0265 | 0.001 | 0.001 | 0.003 | | | 13:00:37 | Yes |
| 3 | 0.0114 | 0.0114 | 0.001 | 0.001 | 0.003 | | | 13:01:11 | Yes |
| Mean: | 0.0249 | 0.0249 | 0.001 | | | | | | |
| SD: | 0.0127 | 0.0127 | 0.0006 | | | | | | |
| %RSD: | 51.14 | 51.14 | 51.14 | | | | | | |

Sequence No.: 102
Sample ID: K1413380-003
Analyst:

Autosampler Location: 67
Date Collected: 12/4/2014 1:02:00 PM
Data Type: Original

Replicate Data: K1413380-003

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|-------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.4725 | 0.4725 | 0.023 | 0.089 | 0.025 | | | 13:02:16 | Yes |
| 2 | 0.3830 | 0.3830 | 0.019 | 0.016 | 0.021 | | | 13:02:50 | Yes |
| 3 | 0.4540 | 0.4540 | 0.022 | 0.045 | 0.024 | | | 13:03:25 | Yes |
| Mean: | 0.4365 | 0.4365 | 0.021 | | | | | | |
| SD: | 0.0473 | 0.0473 | 0.0023 | | | | | | |
| %RSD: | 10.83 | 10.83 | 10.83 | | | | | | |

User canceled analysis.

Analysis Begun

Logged In Analyst: ALKLS.ALKLSXP315
Spectrometer Model: AAnalyst 200, S/N 200S5061701

Technique: AA FIAS-Flame

Autosampler Model: AS-90

Sample Information File: C:\data-AA\ACOMET10\Sample Information\120414-As1.sif

Batch ID: 120414-As1

Results Data Set: 120414-As1

Results Library: C:\data-AA\ACOMET10\Results\Results Se 2013.mdb

Sequence No.: 103
Sample ID: K1412945-001DISS
Analyst:

Autosampler Location: 85
Date Collected: 12/4/2014 1:04:07 PM
Data Type: Original

Replicate Data: K1412945-001DISS

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1638 | 0.1638 | 0.008 | 0.009 | 0.010 | | | 13:04:23 | Yes |
| 2 | 0.1749 | 0.1749 | 0.008 | -0.008 | 0.011 | | | 13:04:57 | Yes |
| 3 | 0.2071 | 0.2071 | 0.010 | 0.037 | 0.012 | | | 13:05:31 | Yes |
| Mean: | 0.1819 | 0.1819 | 0.009 | | | | | | |
| SD: | 0.0225 | 0.0225 | 0.0011 | | | | | | |
| %RSD: | 12.36 | 12.36 | 12.36 | | | | | | |

Sequence No.: 104
Sample ID: CCV
Analyst:

Autosampler Location: 5
Date Collected: 12/4/2014 1:06:20 PM
Data Type: Original

Replicate Data: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|------|------------|---------|---------|------|------|-------|-------|------|------|
|------|------------|---------|---------|------|------|-------|-------|------|------|

| # | ug/L | ug/L | Signal | Area | Height | Area | Height | Stored |
|--------------|--------|--------|--------|-------|--------|------|--------|--------------|
| 1 | 7.953 | 7.953 | 0.385 | 1.477 | 0.388 | | | 13:06:38 Yes |
| 2 | 7.270 | 7.270 | 0.352 | 0.899 | 0.355 | | | 13:07:12 Yes |
| Changing BOC | | | | | | | | |
| 3 | 7.963 | 7.963 | 0.386 | 1.389 | 0.388 | | | 13:07:46 Yes |
| Mean: | 7.729 | 7.729 | 0.375 | | | | | |
| SD: | 0.3971 | 0.3971 | 0.0192 | | | | | |
| %RSD: | 5.138 | 5.138 | 5.14 | | | | | |

Changing BOC

QC value within limits for As 193.70 Recovery = 103.05%

All analyte(s) passed QC.

Sequence No.: 105

Autosampler Location: 1

Sample ID: CCB

Date Collected: 12/4/2014 1:08:37 PM

Analyst:

Data Type: Original

Replicate Data: CCB

| Repl | SampleConc | StdConc | Blncorr | Peak | Peak | Bkgnd | Bkgnd | Time | Peak |
|-------|------------|---------|---------|--------|--------|-------|--------|----------|--------|
| # | ug/L | ug/L | Signal | Area | Height | Area | Height | | Stored |
| 1 | 0.1444 | 0.1444 | 0.007 | 0.030 | 0.009 | | | 13:08:53 | Yes |
| 2 | 0.0089 | 0.0089 | 0.000 | -0.046 | 0.003 | | | 13:09:27 | Yes |
| 3 | 0.0622 | 0.0622 | 0.003 | 0.013 | 0.005 | | | 13:10:01 | Yes |
| Mean: | 0.0718 | 0.0718 | 0.003 | | | | | | |
| SD: | 0.0683 | 0.0683 | 0.0033 | | | | | | |
| %RSD: | 95.07 | 95.07 | 95.07 | | | | | | |

QC value within limits for As 193.70 Recovery = Not calculated

All analyte(s) passed QC.

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive

Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-69445-1

Client Project/Site: Rio Tinto

For:

ARCADIS U.S., Inc.

8725 Rosehill

Suite 350

Lenexa, Kansas 66215

Attn: Alex Walter



Authorized for release by:

1/14/2015 12:45:37 PM

Heather Wagner, Project Manager I

(615)301-5763

heather.wagner@testamericainc.com

LINKS

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results through

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------------|--------|----------------|----------------|
| 490-69445-1 | GWM-02S(20141222)HS FF | Water | 12/22/14 13:30 | 12/24/14 09:00 |
| 490-69445-2 | GWM-02S(20141222)HS | Water | 12/22/14 13:30 | 12/24/14 09:00 |
| 490-69445-3 | GWM-02S(20141223)LF FF | Water | 12/23/14 11:20 | 12/24/14 09:00 |
| 490-69445-4 | GWM-02S(20141223)LF | Water | 12/23/14 11:20 | 12/24/14 09:00 |

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Job ID: 490-69445-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-69445-1

Comments

No additional comments.

Receipt

The samples were received on 12/24/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| □ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Client Sample ID: GWM-02S(20141222)HS FF

Lab Sample ID: 490-69445-1

Date Collected: 12/22/14 13:30

Matrix: Water

Date Received: 12/24/14 09:00

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Arsenic | 20.4 | | 0.100 | 0.0720 | mg/L | | 01/02/15 11:58 | 01/06/15 16:28 | 10 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Client Sample ID: GWM-02S(20141222)HS

Lab Sample ID: 490-69445-2

Date Collected: 12/22/14 13:30

Matrix: Water

Date Received: 12/24/14 09:00

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Arsenic | 25.5 | | 0.100 | 0.0720 | mg/L | | 01/07/15 07:46 | 01/12/15 22:44 | 10 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Client Sample ID: GWM-02S(20141223)LF FF

Lab Sample ID: 490-69445-3

Date Collected: 12/23/14 11:20

Matrix: Water

Date Received: 12/24/14 09:00

Method: 6010C - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|-------|------|---|----------------|----------------|---------|
| Arsenic | 49.9 | | 0.200 | 0.144 | mg/L | | 01/02/15 11:58 | 01/06/15 16:33 | 20 |

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Client Sample ID: GWM-02S(20141223)LF

Lab Sample ID: 490-69445-4

Date Collected: 12/23/14 11:20

Matrix: Water

Date Received: 12/24/14 09:00

Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|--------|------|---|----------------|----------------|---------|
| Arsenic | 43.2 | | 0.100 | 0.0720 | mg/L | | 01/07/15 07:46 | 01/12/15 22:48 | 10 |

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-218696/1-A
Matrix: Water
Analysis Batch: 218979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 218696

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 01/07/15 07:46 | 01/07/15 23:56 | 1 |

Lab Sample ID: LCS 490-218696/2-A
Matrix: Water
Analysis Batch: 218979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 218696

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.0500 | 0.05350 | | mg/L | | 107 | 80 - 120 |

Lab Sample ID: LCS 490-218696/2-A
Matrix: Water
Analysis Batch: 219983

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 218696

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|------|---|------|-----------------|
| Arsenic | 0.0500 | 0.04870 | | mg/L | | 97 | 80 - 120 |

Lab Sample ID: LCSD 490-218696/3-A
Matrix: Water
Analysis Batch: 218979

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 218696

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | 0.0500 | 0.05060 | | mg/L | | 101 | 80 - 120 | 6 | 20 |

Lab Sample ID: LCSD 490-218696/3-A
Matrix: Water
Analysis Batch: 219983

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 218696

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | 0.0500 | 0.04870 | | mg/L | | 97 | 80 - 120 | 0 | 20 |

Lab Sample ID: 490-69558-G-1-B MS
Matrix: Water
Analysis Batch: 218979

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 218696

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Arsenic | <0.0100 | | 0.0500 | 0.05190 | | mg/L | | 104 | 75 - 125 |

Lab Sample ID: 490-69558-G-1-C MSD
Matrix: Water
Analysis Batch: 218979

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 218696

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|--------------|
| Arsenic | <0.0100 | | 0.0500 | 0.05180 | | mg/L | | 104 | 75 - 125 | 0 | 20 |

Lab Sample ID: MB 490-217989/1-A
Matrix: Water
Analysis Batch: 218215

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 217989

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|--------|---------|------|---|----------------|----------------|---------|
| Arsenic | <0.0100 | | 0.0100 | 0.00720 | mg/L | | 01/02/15 11:58 | 01/04/15 23:58 | 1 |

TestAmerica Nashville

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Lab Sample ID: LCS 490-217989/2-A
Matrix: Water
Analysis Batch: 218215

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 217989

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Arsenic | 0.100 | 0.1040 | | mg/L | | 104 | 80 - 120 |

Lab Sample ID: 490-69041-A-1-B MS
Matrix: Water
Analysis Batch: 218215

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 217989

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Arsenic | <0.0100 | | 0.100 | 0.1083 | | mg/L | | 108 | 75 - 125 |

Lab Sample ID: 490-69041-A-1-C MSD
Matrix: Water
Analysis Batch: 218215

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 217989

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | <0.0100 | | 0.100 | 0.1089 | | mg/L | | 109 | 75 - 125 | 1 | 20 |

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Metals

Prep Batch: 217989

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-69041-A-1-B MS | Matrix Spike | Dissolved | Water | 3005A | |
| 490-69041-A-1-C MSD | Matrix Spike Duplicate | Dissolved | Water | 3005A | |
| 490-69445-1 | GWM-02S(20141222)HS FF | Dissolved | Water | 3005A | |
| 490-69445-3 | GWM-02S(20141223)LF FF | Dissolved | Water | 3005A | |
| LCS 490-217989/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| MB 490-217989/1-A | Method Blank | Total Recoverable | Water | 3005A | |

Analysis Batch: 218215

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-------------------|--------|--------|------------|
| 490-69041-A-1-B MS | Matrix Spike | Dissolved | Water | 6010C | 217989 |
| 490-69041-A-1-C MSD | Matrix Spike Duplicate | Dissolved | Water | 6010C | 217989 |
| LCS 490-217989/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 217989 |
| MB 490-217989/1-A | Method Blank | Total Recoverable | Water | 6010C | 217989 |

Prep Batch: 218696

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-69445-2 | GWM-02S(20141222)HS | Total/NA | Water | 3010A | |
| 490-69445-4 | GWM-02S(20141223)LF | Total/NA | Water | 3010A | |
| 490-69558-G-1-B MS | Matrix Spike | Total/NA | Water | 3010A | |
| 490-69558-G-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | 3010A | |
| LCS 490-218696/2-A | Lab Control Sample | Total/NA | Water | 3010A | |
| LCSD 490-218696/3-A | Lab Control Sample Dup | Total/NA | Water | 3010A | |
| MB 490-218696/1-A | Method Blank | Total/NA | Water | 3010A | |

Analysis Batch: 218721

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------------|-----------|--------|--------|------------|
| 490-69445-1 | GWM-02S(20141222)HS FF | Dissolved | Water | 6010C | 217989 |
| 490-69445-3 | GWM-02S(20141223)LF FF | Dissolved | Water | 6010C | 217989 |

Analysis Batch: 218979

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-69558-G-1-B MS | Matrix Spike | Total/NA | Water | 6010C | 218696 |
| 490-69558-G-1-C MSD | Matrix Spike Duplicate | Total/NA | Water | 6010C | 218696 |
| LCS 490-218696/2-A | Lab Control Sample | Total/NA | Water | 6010C | 218696 |
| LCSD 490-218696/3-A | Lab Control Sample Dup | Total/NA | Water | 6010C | 218696 |
| MB 490-218696/1-A | Method Blank | Total/NA | Water | 6010C | 218696 |

Analysis Batch: 219983

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-69445-2 | GWM-02S(20141222)HS | Total/NA | Water | 6010C | 218696 |
| 490-69445-4 | GWM-02S(20141223)LF | Total/NA | Water | 6010C | 218696 |
| LCS 490-218696/2-A | Lab Control Sample | Total/NA | Water | 6010C | 218696 |
| LCSD 490-218696/3-A | Lab Control Sample Dup | Total/NA | Water | 6010C | 218696 |

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Client Sample ID: GWM-02S(20141222)HS FF

Date Collected: 12/22/14 13:30

Date Received: 12/24/14 09:00

Lab Sample ID: 490-69445-1

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 217989 | 01/02/15 11:58 | AJD | TAL NSH |
| Dissolved | Analysis | 6010C | | 10 | 50 mL | 50 mL | 218721 | 01/06/15 16:28 | ADN | TAL NSH |

Client Sample ID: GWM-02S(20141222)HS

Date Collected: 12/22/14 13:30

Date Received: 12/24/14 09:00

Lab Sample ID: 490-69445-2

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 218696 | 01/07/15 07:46 | AJD | TAL NSH |
| Total/NA | Analysis | 6010C | | 10 | 50 mL | 50 mL | 219983 | 01/12/15 22:44 | CME | TAL NSH |

Client Sample ID: GWM-02S(20141223)LF FF

Date Collected: 12/23/14 11:20

Date Received: 12/24/14 09:00

Lab Sample ID: 490-69445-3

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Dissolved | Prep | 3005A | | | 50 mL | 50 mL | 217989 | 01/02/15 11:58 | AJD | TAL NSH |
| Dissolved | Analysis | 6010C | | 20 | 50 mL | 50 mL | 218721 | 01/06/15 16:33 | ADN | TAL NSH |

Client Sample ID: GWM-02S(20141223)LF

Date Collected: 12/23/14 11:20

Date Received: 12/24/14 09:00

Lab Sample ID: 490-69445-4

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3010A | | | 50 mL | 50 mL | 218696 | 01/07/15 07:46 | AJD | TAL NSH |
| Total/NA | Analysis | 6010C | | 10 | 50 mL | 50 mL | 219983 | 01/12/15 22:48 | CME | TAL NSH |

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

| Method | Method Description | Protocol | Laboratory |
|--------|--------------------|----------|------------|
| 6010C | Metals (ICP) | SW846 | TAL NSH |

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Rio Tinto

TestAmerica Job ID: 490-69445-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|------------------------|---------------|------------|------------------|-----------------|
| A2LA | A2LA | | NA: NELAP & A2LA | 12-31-15 |
| A2LA | ISO/IEC 17025 | | 0453.07 | 12-31-15 |
| Alaska (UST) | State Program | 10 | UST-087 | 10-31-15 |
| Arizona | State Program | 9 | AZ0473 | 05-05-15 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-15 |
| California | NELAP | 9 | 1168CA | 10-31-14 * |
| Connecticut | State Program | 1 | PH-0220 | 12-31-15 |
| Florida | NELAP | 4 | E87358 | 06-30-15 |
| Illinois | NELAP | 5 | 200010 | 12-09-15 |
| Iowa | State Program | 7 | 131 | 04-01-16 |
| Kansas | NELAP | 7 | E-10229 | 03-31-15 * |
| Kentucky (UST) | State Program | 4 | 19 | 06-30-15 |
| Kentucky (WW) | State Program | 4 | 90038 | 12-31-15 |
| Louisiana | NELAP | 6 | 30613 | 06-30-15 |
| Maryland | State Program | 3 | 316 | 03-31-15 |
| Massachusetts | State Program | 1 | M-TN032 | 06-30-15 |
| Minnesota | NELAP | 5 | 047-999-345 | 12-31-15 |
| Mississippi | State Program | 4 | N/A | 06-30-15 |
| Montana (UST) | State Program | 8 | NA | 02-24-20 |
| Nevada | State Program | 9 | TN00032 | 07-31-15 |
| New Hampshire | NELAP | 1 | 2963 | 10-09-15 |
| New Jersey | NELAP | 2 | TN965 | 06-30-15 |
| New York | NELAP | 2 | 11342 | 03-31-15 |
| North Carolina (WW/SW) | State Program | 4 | 387 | 12-31-15 |
| North Dakota | State Program | 8 | R-146 | 06-30-15 |
| Ohio VAP | State Program | 5 | CL0033 | 10-16-15 |
| Oklahoma | State Program | 6 | 9412 | 08-31-15 |
| Oregon | NELAP | 10 | TN200001 | 04-29-15 |
| Pennsylvania | NELAP | 3 | 68-00585 | 06-30-15 |
| Rhode Island | State Program | 1 | LAO00268 | 12-30-14 * |
| South Carolina | State Program | 4 | 84009 (001) | 02-28-15 |
| South Carolina (DW) | State Program | 4 | 84009 (002) | 02-23-17 |
| Tennessee | State Program | 4 | 2008 | 02-23-17 |
| Texas | NELAP | 6 | T104704077 | 08-31-15 |
| USDA | Federal | | S-48469 | 10-30-16 |
| Utah | NELAP | 8 | TN00032 | 07-31-15 |
| Virginia | NELAP | 3 | 460152 | 06-14-15 |
| Washington | State Program | 10 | C789 | 07-19-15 |
| West Virginia DEP | State Program | 3 | 219 | 02-28-15 |
| Wisconsin | State Program | 5 | 998020430 | 08-31-15 |
| Wyoming (UST) | A2LA | 8 | 453.07 | 12-31-15 |

* Certification renewal pending - certification considered valid.

TestAmerica Nashville

COOLER RECEIPT FORM



490-69445 Chain of Custody

Cooler Received/Opened On 12/24/2014 @ 0900

1. Tracking # 2797 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 0.3 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...

[illegible]

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-69445-1

Login Number: 69445

List Source: TestAmerica Nashville

List Number: 1

Creator: Gambill, Shane

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is \leq background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 0.3 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

APPENDIX E

**DISPOSAL MANIFEST
AND
CERTIFICATE OF DISPOSAL**

NO DISPOSAL CONDUCTED THIS MONITORING ROUND